

BUSINESS WEEK

Economics

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The New Industrial Dictionary

TENTH REVISED EDITION

Words are being abused. Just as there is a law against misbranding drugs, there should be a law against misbranding people. It's time certain definitions were made clear.

bu'reau-crat—a somewhat necessary evil in war; an inexcusable evil in peacetime.

com'mu-nism—loss of all personal freedom and opportunity; subjugation of the people by a handful in power.

dem'o-crat—one who believes in constitutional government, not government by bureaus nor pressure group minorities.

ef-fi'cient pro-duc'tion—the only way to reduce costs, hence increase consumption, hence provide more and better jobs.

Fas'cism—same as "communism".

gov'ern-ment—the servant of the people, *not* their master.

job—an opportunity; something you earn the right to keep only if you fill it efficiently and honestly.

ma-chine'—modern version: means of increasing the workman's productivity and hence his pay. Obsolete version: sure way of increasing costs and so reducing markets and jobs.

prof'it—the only avenue by which more and more jobs at better and better pay can be had.

tax—necessary charge for government when wisely levied; when too large or unwisely levied, it is surest possible way to kill business and so dry up the source of jobs.

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BUSINESS WEEK • NOVEMBER 24 • NUMBER 107
(with which are combined The Analyst and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman • Publication Office 99-10 North Broadway, Albany 1, N. Y. Editorial and Executive Offices, 330 W. 42nd St., New York 18 • James H. McGraw, Jr., President; Curtis W. McGraw, Senior Vice-President and Treasurer; Howard Ehrlich, Vice-President and General Business Manager; Willard Chevalier, Vice-President and Editorial Assistant to the President; Joseph A. Gerardi, Secretary • Address all correspondence regarding subscriptions to J. E. Blackburn, Jr., Director of Circulation, Business Week, 330 West 42nd St., New York 18. Allow ten days for change of address. Subscription rates—United States, Mexico and Central and South American countries \$5.00 a year, Canada \$6.00 for a year • Entered as second class matter December 4, 1936 at the Post Office at Albany, N. Y., under the Act of March 3, 1879. Return postage guaranteed • Printed in U. S. A. Copyright 1946 by McGraw-Hill Publishing Company, Inc. — All Rights Reserved.

HEALTH BILL MANEUVERS

It's clear to even the most astigmatic now that neither labor, management, or the country is going to get anything worth talking about out of the President's over-publicized Labor-Management Conference (page 104).

From a purely political view, the fact that management gets nothing is no problem. And "the country" is such an amorphous concept to Washington that there won't be any worrying on its account. But that the labor leaders will soon be leaving the conference, having got from it nothing except an opportunity to make some speeches—which they didn't need Harry Truman to provide—is a fact which disturbs high officials who think as far ahead as 1948.

To repair what damage this might occasion, the President, engaging in some of the fastest footwork he has yet displayed, sent Congress a message this week calling for the enactment of compulsory national health insurance. By the time the disenchanted labor leaders get back to their bailiwicks from the conference fiasco, their constituents will be talking about how Truman has gone further than Roosevelt ever attempted to deliver one of labor's most cherished desires.

First Step Beyond Roosevelt

Actually, the realities of the congressional situation make the health insurance proposal an empty gesture, but it's a politically shrewd maneuver. Labor and the left have started to complain audibly that Truman has nothing to offer but warmed over Roosevelt projects. Health insurance answers that—it takes the President one step—and his first such step—beyond his predecessor.

Roosevelt never went so far as to ask Congress to provide health insurance. Bills introduced every year by Senator Robert F. Wagner, New York Democrat, wasted on the vine with no White House word to keep them alive. The most Roosevelt ever did was to transmit to Congress "for study" a report of his interdepartmental committee on national health and welfare which, by implication, commended a health insurance program. Roosevelt may have hesitated because his stamp of approval might have precipitated a fight on the issue. Now, however, with the back of Congress turned squarely on reform, the most that can be expected is a sham battle.

In the faint hope of clearing the track for Truman's health program, Sen. Wag-

ner and Rep. John D. Dingell, Michigan Democrat, struck the health provisions from their pending omnibus bills to expand the social security system, now stymied in committee, and incorporated them in new bills (S. 1606, H.R. 4370). Health insurance sections were stripped of their tax provisions.

Sponsors See Chance for Vote

The effect of this maneuver is to throw consideration of the health program into the Senate Committee on Education & Labor and the House Ways & Means Committee. Congressional "financiers" have had no appetite for large-scale expansion of social security, a situation which has kept the "socialized medicine" proposals in committee for two years.

Sponsors of the health care program see a chance, in this fashion, to bring it to a vote on the House and Senate floors, where they think it will pass, but it cannot take effect until the House Ways & Means Committee, in its own good time, fixes the rates of insurance contributions and taxes.

FARM PRICE COMPROMISE

An Administration-farm bloc compromise agreement to support postwar prices of farm products above the 90% of parity minimums required by Congress is indicated by sudden postponement of debate on both the Thomas (Senate) and Pace (House) bills (BW—Nov. 10'45, p19) to force parity prices up.

One move in this direction is the commitment by the Agriculture Dept. to support the 1946-crop flaxseed price at \$3.60 a bu. at Minneapolis. This year's support is \$3 a bu. plus an incentive payment of \$5 an acre to growers. Official explanation: Increased production is needed to meet postwar needs.

Similar action may follow on soybeans—a support lower than this year's \$2.04 a bu. (125% of parity), but higher than the 90% legal minimum.

DEATH SENTENCE AT STAKE

Six Supreme Court justices, four of them Roosevelt appointees, will decide whether the "death sentence" clause of the Public Utility Holding Company Act of 1935 is constitutional. The double-barreled clause, which allows the Securities & Exchange Commission to order registered holding companies to divest themselves of all assets except

those contained in a single integrated system or to direct them to dissolve themselves, is about the last of the basic New Deal reforms to be tested before the high court.

Since only six members are sitting on the case (the other three disqualified themselves) and since constitutionality already has been upheld by lower courts, the chances of upsetting the death sentence are slim indeed, for a 3-to-3 tie vote will affirm the lower court findings of constitutionality.

Missing are Justices Jackson, Douglas, and Reed. For many utility systems, upset of the death sentence would be a hollow victory, for a number of properties which could not now be recovered have been disposed of already under the law.

BOOTLEGGER CEILINGS

Just as a bank robber may not park by a fire hydrant, a bootlegger may not sell at over-ceiling prices. The latter doctrine became official this week when U. S. Supreme Court refused to review the case of two liquor dealers from legally dry Mississippi against whom OPA had obtained a judgment.

The U. S. Emergency Court of Appeals had upheld OPA (BW—Sep. 22'45, p82), finding no inconsistency in the application of the price laws to merchandise sold illegally.

BUYERS FOR THE INCHES

Pulling and hauling over disposition of the Big Inch and Little Inch pipelines has begun in earnest before the special Senate committee studying petroleum resources (BW—Sep. 22'45, p42). Representatives of two groups, one from New York the other from Texas, have testified that their associates are ready to buy the lines to transport natural gas from Texas to the East.

The major oil companies, who want to make sure that the two lines aren't used to haul gasoline or oil, favor converting them to gas, or holding them in standby condition as a "military asset."

But the Assn. of American Railroads and the United Mine Workers bitterly oppose using the "inches" for gas, contending that it would reduce coal loadings, hurt 2,500,000 miners and railroad workers. There are other opinions, too: Reconstruction Finance Corp. would like to sell them; the Joint Chiefs of Staff have recommended their

with a recapture clause in the event of a future emergency. And, of course, the Justice Dept. wants to make sure that monopoly is not fostered by their

ROUNDHOUSE SWING

Robert R. Young, one of the so-far-unsuccessful bidders for Pullman's sleep-car business (page 70), has just let go in a roundhouse swing of retaliation against his railroad competitors. In a special conference, Young charged, among other things, that "collusion" among the roads has blocked through transcontinental Pullman service, which is not his idea of his.

Young controls Chesapeake & Ohio, Nickel Plate, Pere Marquette, and Wheeling & Lake Erie. His avowed sympathy for the Justice Dept. in its antitrust suit against the western railroads (BW-Jul. 14 '45, p7) already has caused much grinding of teeth among other railroad men, who want very much to present a united front. His latest blast comes just when the stage is set for passage of the Bulwinkle bill, which would exempt agreements among carriers from antitrust prosecution if approved by the Interstate Commerce Commission.

The Interstate & Foreign Commerce Committee finally reported the Bulwinkle bill to the House last week, and carriers hope to coast it through Congress quickly without attracting any adverse attention. Fear that Young's sudden commotion will spoil their chance is causing the roads more worry than his threat to take the Pullman case to the ICC and the Supreme Court if necessary.

ANTI-PETRILLO BILL

Latest attempt to curb James C. Petrillo, president of the American Federation of Musicians, comes from Capitol Hill. Chairman Clarence F. Lea of the House Interstate Commerce Committee has introduced a bill (1) to abolish the "unemployment" fee paid by radio stations for using transcriptions, (2) to prohibit certain "coercive practices" that compel broadcasters to hire more employees than necessary, and (3) to forbid the payment of "standby" fees to a union where musicians perform gratis in the interests of culture and education.

Lea's measure was inspired by Petrillo's recent demand that networks hire

extra musical staffs if standard programs are duplicated on FM stations (BW-Nov. 10 '45, p32).

TAX EXEMPT INCOMES

The Treasury's tabulation of income reports from tax-exempt organizations won't have much immediate effect on the fight over the privileged tax status of such groups as farm cooperatives and labor unions. In their present form, the figures are too incomplete to provide good ammunition for either side.

The tabulation does show enough to make it practically certain that the income reports—which Congress required for the first time in the 1943 revenue act—will be continued and perhaps expanded. Tax exempt organizations reported total gross receipts in 1943 of \$6,158,680,000, with farm co-ops getting \$3,020,849,000, and labor organizations \$418,337,000. Total assets of tax exempt organizations were reported as \$30,200,000,000, with mutual savings banks accounting for \$7,180,800,000, farm co-ops \$489,044,000, and labor groups \$40,693,000, but balance sheet statistics, particularly in the reports from labor unions, were fragmentary.

While these figures can't support any legislative conclusions, they are enough to whet congressional appetites. The Treasury already has been instructed to keep on digging.

GOLD RUSH IN REVERSE

The U. S. Bureau of Reclamation is prospecting for gold, as an incident to the construction of the Anderson Ranch dam in southwestern Idaho.

But, unlike most prospecting, this job is to prove that there isn't any worthwhile "color" in the area to be flooded when the dam is completed. This is to balk legal action which might later be started by holders of placer claims that will be submerged by the 13½-mi. reservoir.

No important quantities of gold have been found on claims tested to date.

BOND POLICY STUDIED

Treasury-Reserve Board credit policy over the long pull will probably center around the method for retiring about \$47 billions of outstanding war bonds.

If holders start cashing in long before

the bonds mature in order to speculate in stocks or real estate, the Treasury will try to get the pay-off money without selling securities to the banks. This will mean constant prodding of public interest in fixed-yield securities. The point of debate will be whether refunding bonds will have to carry higher interest rates than the war savings bonds.

If bonds are cashed, as at present, largely by people who simply need the money because of shrinking income, the Treasury will have no qualms about further loading up the banks.

ADVICE ABOUT HOMES

The Office of War Mobilization & Reconversion is making another move toward clamping the inflation lid on rising construction costs (BW-Nov. 10 '45, p21).

Information directors of all government agencies are being asked to go all-out on a program of propaganda designed to show that, with building materials still short, prospective homeowners should wait before building, and resist the temptation to spend too much on frills and furbelows. Emphasis will also be placed on giving veterans a first call on the available new accommodations.

FOUND: NAILS, ETC.

Working in conjunction with Surplus Property Administration, the Office of War Mobilization & Reconversion's interagency committee on construction has just put the final touches on a plan to pick up construction materials still lying around Army and Navy installations in this country.

Contractors would be allowed to buy directly from the services up to \$300 worth of whatever odds and ends they can find—lumber, nails, pumps, screws, fiberboard, valves, pipe. This will make it possible to complete civilian jobs now being held up for lack of such items.

PATMAN IN PATMAN CASE

The U. S. Supreme Court has accepted from Rep. Wright Patman a brief filed as friend of the court in support of an appeal in which Bruce's Juices of Tampa, Fla., alleges violation by American Can Co. of the Robinson-Patman price discrimination amendment to the antitrust laws. Court attaches have no recollection of any con-

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gressman's ever having intervened before in litigation involving a law bearing his own name.

In his brief the Texas Democrat stated that the case represents "federal issues of outstanding importance in law and public policy" and that he has "no personal interest, of a financial character, in the outcome of this litigation."

Another champion of small business, Thurman Arnold, will argue the case for the Tampa concern.

CAPITAL GAINS (AND LOSSES)

No Secretary of State since Charles Evans Hughes has been given such a free hand in the conduct of foreign relations as Secretary James F. Byrnes is receiving from President Truman. Byrnes, though still feeling his way cautiously, is very little awed by the diplomatic technicians.

There is renewed talk of Secretary of the Interior Harold Ickes' voluntary retirement from the cabinet. Latest to be mentioned as a possible successor is Bartley Crum, San Francisco attorney, a Willkie Republican who supported the Roosevelt-Truman ticket in 1944. No change is likely, however, until the Anglo-American oil treaty has been ratified.

The most detached view in Washington is that thus far the congressional Pearl Harbor inquiry has been a political circus and an investigatory farce, made up of about equal parts of partisan politics and Administration whitewash.

WPB's successor, Civilian Production Administration, will continue the practice of issuing monthly "Progress Reports." The first one will cover reconversion bottlenecks.

The Dept. of Justice is ready to go into court to revive its 1940 antitrust suit against a score of leading oil companies and the American Petroleum Institute, but will hold its hand until the industry has settled the wage controversy which necessitated government seizure of many refineries last month (BW—Oct.13'45,p100).

—Business Week's
Washington Bureau

THE COVER

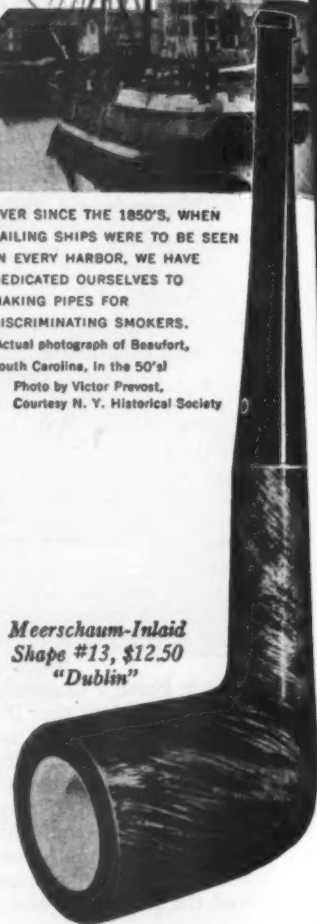
Spokesmen for this country's rubber industry, Harvey S. Firestone, Jr., president of Firestone, John L. Collyer, president of Goodrich, and Paul W. Litchfield, chairman of Goodyear, sail for London to confer about the future rubber supply and about the competitive relationship of crude and synthetic rubber (page 15).

Ever since the 50's HE



EVER SINCE THE 1850'S, WHEN SAILING SHIPS WERE TO BE SEEN IN EVERY HARBOR, WE HAVE DEDICATED OURSELVES TO MAKING PIPES FOR DISCRIMINATING SMOKERS. (Actual photograph of Beaufort, South Carolina, in the 50's) Photo by Victor Prevost, Courtesy N. Y. Historical Society

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BUSINESS WEEK
 SEPTEMBER 24, 1945



Strikes, both large and small, continue to retard reconversion and to hold back production of civilian goods needed to curb inflation.

Threats of still larger strikes cloud the business outlook.

All this overshadows a steady trickle of wage settlements, most of them peaceful. A few hundred workers are covered here, a few thousand there—and most of them in the range of 10% to 15% pay increases.

A New England textile mill raises basic pay to 65¢ an hour; a big shoe company ups wages 10% to 12½%; C.I.O.'s lumbermen, claiming membership of 30,000, sign for 12½¢ without a strike, but A.F.L.'s group, twice as large, stays out; two airlines grant 48 hours' pay for 40 hours' work.

These wage moves may not spell labor peace, but at the moment they carry more promise than the Washington conference (page 104).

The atmosphere in which wage negotiations are conducted will change substantially in the next two or three months.

More veterans will be looking for jobs. They are being mustered out a lot faster than was expected in August and September. The rate now is about 1,500,000 a month against a predicted peak of 1,000,000.

Most of them don't look for jobs until 30 to 60 days after release. But there will be plenty of them around factory gates by January.

Selective Service will back them in claims to overriding seniority. Newspapers will print stories of their being denied their rights. Unions' positions will be less potent than they are now.

Charges of slowness in discharging veterans will continue to be hot political material, but they aren't justified in the main.

There are, to be sure, many cases where high-point men are held and lower ones let out. Just the same, this is one time when Army-Navy are not really guilty of hoarding.

Joblessness right now probably is materially higher than the painstaking samplings of the Bureau of the Census indicate.

The bureau's unemployment figure for October was just over 1,500,000. Unemployment compensation claims, at the same time, were running about 1,700,000; the number out of jobs should be higher than "comp." claims.

Actually, Census is up against an impossible job. Workers are moving, people are quitting the labor force, veterans aren't seeking work. Other people appear to be unemployed but actually are drawing compensation while preparing to leave the labor force.

Many students put unemployment nearer 2,500,000 than 1,500,000.

Whether unemployment rises to the 8,000,000 that Washington economists have been expecting by spring now depends mainly on three things:

(1) Will as many jobs become available as anticipated? Factories and nonmanufacturing lines hired a million more people in September and October than expected. Maybe they will need that many fewer from now to next April. In any case, the rise in employment will be slow to Jan. 1.

(2) Will strikes and price bottlenecks jam the works? They have interrupted passenger car and truck output again, and paralyzing walkouts in autos and steel could set industrial production back by months.

(3) Will as many as 4,000,000 "emergency" workers leave the labor

THE OUTLOOK (Continued)

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force? This depends largely on the other two points. The number that sticks will depend on how attractive civilian jobs look.

We are likely to get a positive answer on the strike problem a good while before we can see what is going to come of the others.

Most employers still haven't come to realize that collective bargaining is a two-way affair (BW—Dec. 2'44, p10), that industry should have its own contract demands to play off against those of labor.

Ford, however, in its demand for 31 contract changes (page 93), now provides an example of how two-way bargaining can work.

This is more sensible than the customary bulldog resistance because it provides a greater area for compromise than a plain wage wrangle.

In this connection, standing behind the price issue is expedient for management now, but tying wages to profits may boomerang. Any rise in profits would be an excuse for the unions to reopen wage issues.

Steel production nudged upward another couple of percentage points this week to approach the best levels since Japan fell.

Yet, with customers crying as loudly as ever for deliveries, the mills are turning out ingot at a rate which still falls 15,000,000 tons short of maximum capacity.

Lack of manpower, reduction in the over-long wartime work-week, and the precarious fuel situation are cited as holding down operations.

Also, it is probable that mills aren't using obsolescent capacity due to the price pinch. It is natural to run inefficient facilities very little when prices crimp profits from even the most efficient.

Steel men talk of retiring anywhere from 5,000,000 to 12,000,000 tons of the present 96,000,000-ton capacity of the industry, depending on how much of the government's war-built plant is used effectively.

By effective use, most mean sale to the private companies.

Extreme urgency of industry's material buying continues to be apparent in copper. Consuming industry is taking over 100,000 tons a month which means drawing on stockpile and imports for 35,000 to 40,000 tons.

If demand holds, there is little chance of domestic mines catching up until well into 1946. The labor simply isn't available.

Textile statisticians are now learning what store buyers soon will find out: Supplies of cottons and woollens will be shorter than ever for next spring's sales.

Of course, less consumer purchasing power (or at least less inclination to spend) may offset part of the merchandise shortage. However, that is still conjectural, and store buyers will fight for everything in sight.

Some people talk of improvement after the year end. The argument is that mills are making goods but holding back supplies because (1) taxes will cut less out of 1946 profits, or (2) they hope for higher prices.

These hold-back stories are heard not alone of textiles. They are almost impossible to verify. Most, undoubtedly, are exaggerated; few manufacturers can afford to carry big inventory on such flimsy motives.

FIGURES OF THE WEEK

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
THE INDEX (see chart below).	*167.9	†165.4	156.4	230.4	162.2
PRODUCTION					
Steel Ingot Operations (% of capacity).....	82.4	80.4	65.1	95.4	97.3
Production of Automobiles and Trucks.....	32,440	†32,225	13,750	20,930	98,236
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$11,640	\$11,668	\$9,977	\$4,263	\$19,433
Electric Power Output (million kilowatt-hours).....	3,985	3,948	3,915	4,450	3,130
Crude Oil (daily average, 1,000 bbls.).....	4,474	4,451	4,237	4,739	3,842
Bituminous Coal (daily average, 1,000 tons).....	2,077	2,078	1,022	1,967	1,685
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	80	81	78	85	86
All Other Carloadings (daily average, 1,000 cars).....	59	61	48	59	52
Money in Circulation (Wednesday series, millions).....	\$28,178	\$28,137	\$27,952	\$24,717	\$19,413
Department Store Sales (change from same week of preceding year).....	+13%	+10%	+11%	+9%	+17%
Business Failures (Dun & Bradstreet, number).....	12	17	15	13	228
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931=100).....	263.8	263.6	261.4	248.3	198.1
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)....	169.5	169.4	169.1	163.3	138.5
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939=100)....	232.3	232.1	230.2	220.9	146.6
Finished Steel Composite (Steel, ton).....	\$58.27	\$58.27	\$58.27	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$17.08	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	12.00¢	12.00¢	12.00¢	12.00¢	12.02¢
Wheat (Kansas City, bu.).....	\$1.69	\$1.69	\$1.68	\$1.59	\$0.99
Sugar (raw, delivered New York, lb.).....	3.75¢	3.75¢	3.75¢	3.75¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	24.02¢	23.96¢	23.32¢	21.34¢	13.94¢
Wool Tops (New York, lb.).....	\$1.330	\$1.330	\$1.330	\$1.340	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.16¢
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.).....	136.6	135.5	131.8	101.1	78.0
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.14%	3.16%	3.20%	3.53%	4.33%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.61%	2.62%	2.62%	2.72%	2.77%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	3%	3%	3%	3%	3-4%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks.....	39,501	39,449	39,362	38,417	23,876
Total Loans and Investments, reporting member banks.....	61,112	61,034	61,075	54,043	28,191
Commercial and Agricultural Loans, reporting member banks.....	6,628	6,480	6,251	6,328	6,296
Securities Loans, reporting member banks.....	3,404	3,368	3,432	2,510	940
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	45,176	45,263	45,471	39,883	14,085
Other Securities Held, reporting member banks.....	3,234	3,240	3,283	2,877	3,710
Excess Reserves, all member banks (Wednesday series).....	1,250	990	1,040	1,055	5,290
Total Federal Reserve Credit Outstanding (Wednesday series).....	24,498	†23,877	23,699	18,807	2,265

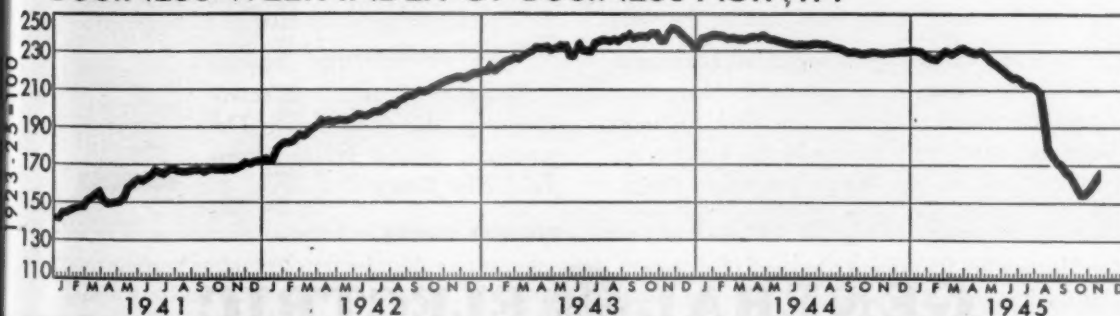
Preliminary, week ended November 17th.

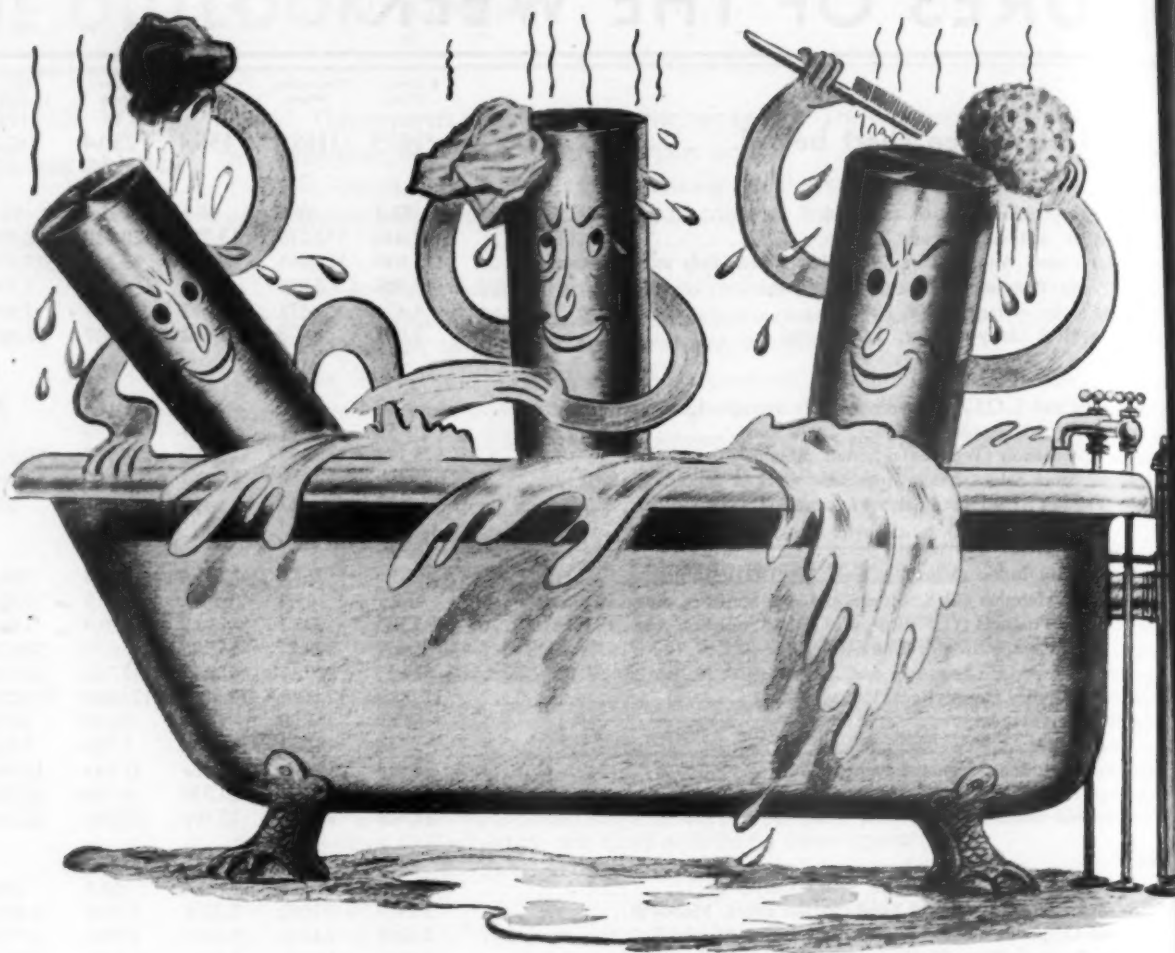
† Revised.

‡ Ceiling fixed by government.

\$ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





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Tire Shortage Begins to Yield

Supply will not meet demand for another six months at least, but over-all situation is improved. Labor shortage and curtailed week cause lag, but end of rationing seems set for Jan. 1, 1946.

The nation's tire situation is getting better—slowly. It will take at least six months for the supply to come anywhere near meeting the demand. It will be even later before inventories are up to prewar volume. Dealer stocks then were between 7,000,000 and 8,000,000.

These facts, rubber industry executives say, boil down to this: It will be nearly a year before consumers can walk into a store and get exactly the tire they want when they want it—and in unlimited quantities.

• **Production Outlook**—Production in passenger car tires has shown gradual gains since V-J Day. Currently, however, output is only 65% of potential capacity, as compared with a wartime peak of 85%.

November production is estimated at 3,900,000 units as compared with a capacity of 6,000,000. For the fourth quarter, the outlook is for 11,000,000 tires, against a third-quarter goal of 7,000,000. The estimate for 1945 is 28,000,000 casings. In the last peacetime year the industry turned out 50,000,000.

Both the Civilian Production Administration and the rubber industry have

their sights set on 66,000,000 tires in 1946. This may well be the peak post-war year in tires. After 1946, the tire makers believe there will be a gradual leveling off in production.

Tire builders have scheduled every unit in the country for capacity production. The reason is simple. Every company figures that if it can't supply potential customers quickly, some competitor will.

The big Akron companies which continued decentralization during the war by building plants in other cities (BW—Feb. 24 '45, p. 19) probably will continue to operate them. Production cutbacks will be at the expense of Akron.

• **Manpower Shortage**—There are several contributing reasons for the current lag in output. One is lack of manpower. The industry can use 7,000 workers now, more than half of that number in Akron.

Another limiting factor is the return to the six-hour day, 36-hour work-week, which the unions demanded after the war ended. Effect of this on output can be measured by the fact that plants turning out more than half of the nation's tire production are affected by

the six-hour day. Absenteeism continues high, frequently forcing the reduction of production schedules.

• **Robots at Work**—Tire production experts say that improved tire building machines could help bolster output, but there are only a few of them in existence. General Tire & Rubber Co. recently announced a newly developed machine that can turn out 720 of the popular 6.00 by 16 size tires in 24 hours. This is five times the output of manual operations using equal manpower, and twice the rate of a semi-automatic machine developed by Seiberling Rubber Co. General has twelve of these robot tire makers on order. Seven have been delivered; five in Akron, two to the company's Waco (Tex.) plant.

The other major companies—Goodrich, U. S. Rubber, Firestone, and Goodyear—are known to be considering use of automatic machines, but have made no announcement of developments. Their manual operations are known to be faster than those of some of the smaller firms.

• **Rationing Off Jan. 1?**—Although production is not up to expectations, CPA has intimated that the lifting of tire rationing is just around the corner. The belief in the industry is that it will come around Jan. 1.

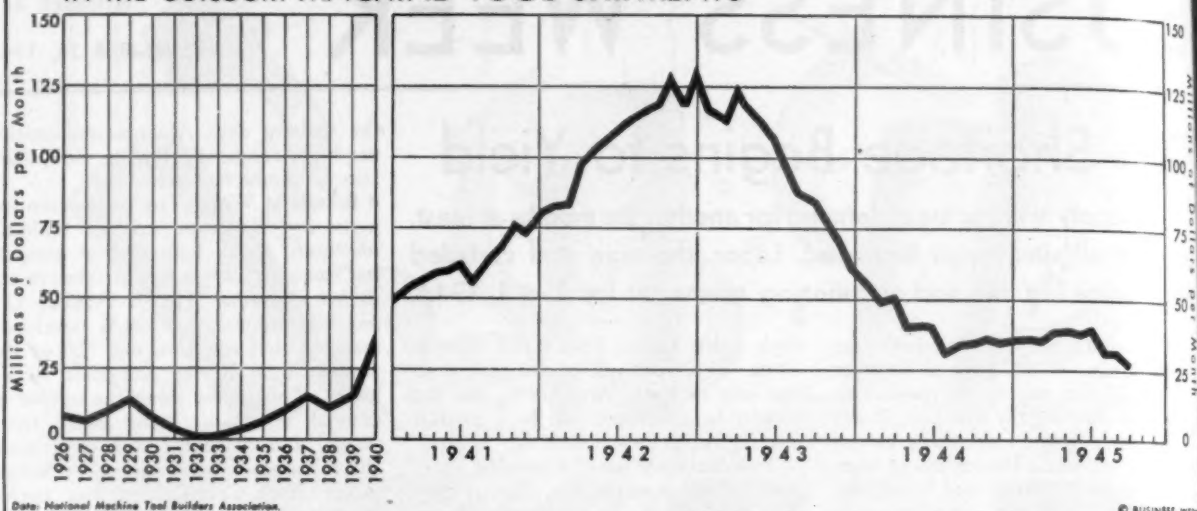
Two developments are leading to such action. One is the constant political pressure on Washington to remove all governmental controls as soon as possible. The other is the difficulty OPA



The continuing shortage of natural rubber to supplement the nation's synthetic supply is partially explained by havoc wrought during the Japanese occupation. Before the war, U. S. Rubber's huge Sumatra and Malaya planta-

tions (left) boasted a total of 10 million rubber trees. Now they report that only one out of every five and a half trees has survived. Some died through neglect (right); some the Japanese destroyed in order to plant food crops.

IN THE OUTLOOK: MACHINE TOOL SHIPMENTS



Sharp reduction from the wartime peak rate of machine-tool shipments tends to obscure the fact that the tool builders still are well ahead of all peacetime records. And there is every reason to believe that this will continue to be the case for many months to come. McGraw-Hill's American Machinist predicts, in fact, that shipments in 1946 will come to about \$250 million. Such a rate of operations would necessitate some further recession from

recent levels above \$25 million a month. Even so, a monthly average shipment rate of \$20 million would be well above the peacetime tops of \$15,400,000 a month for 1929 and \$16,300,000 for 1937. The present order backlog comes to about \$200 million; tool builders expect this to be substantially augmented with business arising from reconversion tooling and postwar expansion as well as through export business, particularly to Russia.

is having in retaining volunteer help on ration boards.

With the end of rationing approaching, OPA has revealed that pending passenger tire applications exceed supplies by nearly 1,000,000 units.

• **More Big Tires**—The situation in the truck and bus tire field is brighter than it was a few months ago. Production in the past few months has averaged 1,100,000 tires, making the present manufacturing rate better than 13,000,000 units. In the last peacetime year, the industry turned out about 7,000,000 of these big casings.

Manufacture of new automobiles is not suffering from the lagging passenger tire output. The auto makers have an unofficial priority and, so far, are getting all the casings they need.

• **Pay Boost Coming**—On the wage front, the industry has indicated that it will have to ask for higher price ceilings if labor wins any major pay raises. Locals of the United Rubber Workers of America (C.I.O.) have filed pay increase demands with the various companies. The demands range from a flat 30¢-an-hour increase, to 52 hours' pay for 36 hours' work, equivalent to a pay boost of 44%.

The industry generally recognizes that it will have to raise wages. The question is how much. If the pay increase can

be held to a moderate amount, there is a strong possibility that the tire manufacturers will absorb it themselves rather than go into a dragout fight with OPA over higher prices. Thus far the rubber industry has been unsuccessful in getting any price relief.

• **Supply Problem**—Meanwhile, fate of the synthetic rubber plants, built during the war at a cost of \$700 million, is a matter of conjecture. Disposed of government-owned units, which account for 95% of total capacity, must first be approved by Congress.

The remainder of total U. S. synthetic capacity is owned by private concerns which built the units for their own purposes. During the war, however, all production was controlled by the government. The private plants include the Hy-Car Chemical Co. facilities in Akron, owned jointly by Goodrich and Phillips Petroleum Co.; Firestone's Butaprene plant in Akron; Goodyear's Chemigum plant in Akron; and du Pont's Neoprene works.

Congressmen are not expected to take any action on the plants until they have digested the recommendations of a government interagency committee which is still studying the national and international rubber problem. The committee's report won't be ready until Jan. 1 at the earliest.

Comparatively few tons of natural rubber have reached the U. S. since the war ended. The big question facing government officials is: Will Dutch and British rubber producers, realizing the need of U. S. tire builders for a certain amount of natural rubber, hold up their price in order to build badly needed trade credits, or will they lower the price in an effort to undercut synthetic rubber over the long run?

• **London Conference**—The whole rubber supply problem, including the tremendous rubber surplus that will face the world by 1947, will come up for an airing at the third world rubber conference which began in London on Tuesday.

On the eve of his departure for the conference, John L. Collyer, president of B. F. Goodrich Co. and former director of U. S. government rubber programs (cover), recommended that the government maintain synthetic rubber plants with a capacity of from 600,000 to 700,000 tons annually. He urged that at least 200,000 tons of general purpose (GR-S) synthetic rubber be produced annually, regardless of economic factors, and suggested keeping the remainder of the plants on a standby basis as insurance against any other national rubber emergency.

Butyl rubber (GR-I), the synthetic

G.M. Strike Brings Showdown

Detroit's troubled labor situation is intensified by OPA price announcements which preclude any wage relief from that quarter. Long-range economic issue threatens serious dislocations.

After 97 days of mounting tension—since C.I.O.'s United Auto Workers announced its demand for a 30% wage increase—union pickets this week finally shut down General Motors plants from coast to coast.

The reconversion wage policy which will govern all industry will come now not out of the labor management conference in Washington (page 104) but out of the strife in Detroit. That policy, written ultimately into the settlement between the company and the union, will almost surely be set with the sanction, if not indeed by the dictate, of the Administration. And that policy will also inevitably affect prices, for OPA's determination to hold the auto price line was part of the explosive charge under the labor front.

When it received its car prices from OPA, Ford stated that "for an indeterminate period we will have to sell our cars at a loss."

Ford prices begin at a retail factory base of \$834 for the three-passenger coupe, compared with \$815 in 1942. The seven Ford prices announced averaged about 4.5% above those for the year 1942.

• **Dealer Margins Pared**—To this increased yield for the manufacturer can

be added another 2.5% cut off dealer margins—evidence, incidentally, of the success of the dealers in their fight with OPA (BW—Nov. 17'45, p17) against having their discounts cut in half, from an average 24% to 12%. The company's total gain, therefore, runs about 7% on 1946 models as compared with 1942's.

Additional ceilings were placed on optional equipment. In dollars, the increase on popular Ford models, the Tudor sedans, figured out like this: de luxe eight, 1942 factory price, \$850; 1946, \$882; super de luxe eight, 1942, \$895; 1946, \$940. (The 1946 model is delivered without a spare tire.)

Studebaker fared better on the OPA deal—in fact was reported well satisfied—with its base price raised from \$779 to \$875 for a Champion three-passenger business coupe. The four prices released to this company averaged about 14% above 1942 levels. However, the 1946 series has been changed so considerably that a comparison can be misleading.

• **Unwelcome News**—General Motors, meanwhile, had the unwelcome news that when its retail prices appear they will average 2.5% below those of 1942. Company spokesmen professed puzzlement at this. They had interpreted the



BUYING REAL ESTATE BY THE TOWN

Banking on the continued activity of Mobile's war-stimulated industries, two Birmingham realty operators have bought a whole town—for slightly more than \$1 million. Within walking distance of Mobile's big paper mills and aluminum plant, Chickasaw, Ala. (above), boasts 500 attractive bungalows, a bustling business section complete with drug store, department store, supermarket, and a \$75,000 theater. It even has police, fire, and garbage departments. Developed as a first World War workers' village by Birmingham's Tennessee Coal, Iron & Railroad Co., Chickasaw was sold to Gulf Shipbuilding Corp., from which its new private owners, Thomas Beach and John Carr of W. B. Leedy & Co., acquired it for investment purposes.

has an exceptional capacity for regenerating air, is giving the nation the inner tubes in the history of the tire industry. At least some of the plants will be kept in operation. It looks for at least 100,000 tons of special rubber to be made yearly in peacetime.

Synthetic's Progress—Some idea of the enormous strides made by synthetic rubber since Pearl Harbor can be gained from these facts:

Of the estimated 900,000 tons of rubber to be consumed in this country each year, 86% will be man-made synthetic and 14% natural crude. In 1941, consumption was 99% natural and synthetic.

The estimated 1946 consumption is 950,000 tons. For the next years, the nation's average annual demand for rubber is placed at 825,000. In 1940 it was 650,000 long tons.

By 1947, rubber experts forecast potential world supply of 3,000,000 tons if U. S. synthetic plants are operating at capacity. This would be about the same as the rubber, natural and synthetic, world could consume. The world's synthetic production capacity is 1,400,000 tons, of which 1,000,000 tons is in U. S. plants. Potential natural rubber production is around 1,600,000

tons. The natural rubber plantations which were in Japanese hands were found in a condition when recaptured. Time would be needed, however, to recruit manpower and replace lost equipment before large-scale production can again get under way. A full year will be needed, it is estimated, giving this country ample time to make up its mind about the future of its synthetic rubber plants.

Technical Progress—The industry looks with the pride of a new father as it talks about its 1945 synthetic rubber. Research, improved compounding and production technique, have made the new tire vastly superior to the 1942 product in resistance to tread wear, skidding, and ply adhesion.

Development has been less rapid in the larger truck tires where it is still necessary to employ a considerable proportion of natural rubber to obtain satisfactory performance.

Little attention was given during the war to improving the basic synthetic rubber structure. Research was devoted chiefly to large-scale production, compounding, and plasticizing. With research now turned to seek new and better polymers, there is a strong belief that new synthetic rubbers, with broader fields of application and service, will be forthcoming in the next few years. Actually research barely crossed the threshold of the field of synthetic rubbers.

OPA pricing formula as meaning that quotations in no case would be lower than on 1942 models. (Detroit firms uniformly claim their costs rose between 15% and 20% during the war.)

But the 2.5% reduction was clearly the reflection of the 2.5% cut in discounts which OPA has required all dealers to absorb. Having determined that G.M. was not entitled to price increases, OPA obviously then decided that G.M. dealers were entitled to no better break than those of other manufacturers.

• **Bowles' Position**—Price Administrator Chester Bowles has defended the reduction in dealer discounts on the ground that increased volume, and elimination of losses on used cars, will give dealers their most profitable year.

Added to the other troubles besetting auto makers was the threat of parts shut-offs due to OPA pricing policies.

Kelsey-Hayes Wheel Co. brought the latter issue to a head by stopping shipments of original equipment truck parts to Ford Motor Co. because of the low ceiling prices on them. Other companies praised Kelsey, but did not immediately follow suit.

• **"Unable to Serve You"**—Kelsey telegraphed Ford, "until we can recover in our selling prices the increased labor and material costs we have been compelled to add since March, 1942, we will be unable to serve you."

Ford promptly laid off 3,000 employees and slashed its truck output two-thirds—a move which probably will bring layoffs to some 12,000 workers in supplier plants besides Kelsey.

This situation overshadowed a quieter one, the growing scarcity of replacement parts sold to motor car makers. These parts are ceiling-priced. Builders who sold them to the car makers, having a firm market, worked on definitely narrow margins. As a result, they find themselves sharply squeezed today by the ceiling.

• **Somewhat Better Off**—An almost parallel situation prevails for producers who sold to the jobber and retail trade. But their margins ran somewhat higher, and so they are not in so precarious a state.

Original equipment parts are selling today to manufacturers at definitely higher levels than the replacement parts, though they are often identical. Suppliers say the car makers have generally recognized the need for increased prices to match increased material and labor costs.

• **Toward a Showdown**—Without regard to prices, car makers saw little hope for sustained output anyway, because of the strike situations. Events were marching toward a final showdown between the industry and the union on varied fronts:



One type of service offered by the new cooperative, Tulsa Industries, Inc., is exemplified by the survey that it is making on a \$385 light tractor (above), designed by a Tulsan. The co-op will find a manufacturer for it if the survey reveals a sufficient market.

General Motors: On Monday U.A.W. called into Detroit its 200 regional representatives assigned to G.M. plants. Shortly after they met, G.M. was served with a new demand, that management agree to arbitrate its wage dispute with the union. This request was so phrased that G.M. acceptance would require it to open its books and other records to the union, and to agree that any wage-increase would not be used as a basis for a price rise. On both of these points the union was making conditions which management consistently had said were unacceptable.

The meeting ended with a unanimous vote for a strike which began at Buick Wednesday morning and spread rapidly.

Ford: Negotiations began this week in an angry atmosphere engendered by the company's militant counterproposals to the union (page 93).

Chrysler: Negotiations are comparatively quiet.

Plate Glass: Strikes in Libbey-Owens-Ford Glass Co. and Pittsburgh Plate Glass Co. were daily reducing inventories and threatening production shortly.

Bearings: Strikes in several big bearing plants, including Cleveland Graphite Bronze, Bohn, Fafnir, and others, have cut deeply into the supply and threaten halts to some output.

Gears: The Warner Gear strike at Muncie, Ind., has already stopped output at Studebaker and Willys.

Frames: The strike at Midland Steel Products Co. has halted Buick and will impair Studebaker's resumption if that company solves its gear problem.

United for Tulsa

Manufacturers' cooperative is easing shocks of reconversion and laying plans for enlarging the city's industrial future.

A cooperative of manufacturers, distributors in Tulsa, Okla., has been taking some of the shocks out of the city's readjustment to peacetime industrial pursuits.

Chartered in Delaware, this co-op, Tulsa Industries, Inc., takes credit for bringing \$300,000 of new business to members in its first three weeks of operation. Membership now embraces 26 industrial plants, and the organization expects to be self-supporting within a year.

• **Potentialities Surveyed**—Last March when Tulsa Industries, Inc., was formed under chamber of commerce auspices, a survey of the industrialists who signed the charter expected the war to end as soon as it did. A survey at that time revealed that the city had 47 manufacturing plants in operation; that most of them had converted from oil field equipment to partial war-contract production.

Several favorable factors for the city's future were believed to be discernible. The survey noted an advantageous geographical location, favorable labor conditions, comparatively low wage scales, low power rates, adequate transportation, and a varied assortment of machine tools and skills.

• **Objectives**—Preparing for the future when plants and manpower might be looking for new assignments, the co-op charted its objectives carefully. It prepared to offer men and machines to outside industrialists who might wish to manufacture in Tulsa the part of the production that was intended for distribution in the Southwest and on the West Coast. Savings in shipping costs to be had from such a program were tabulated.

Within its own membership, Tulsa Industries, Inc., provided for interchange of facilities, and for bringing in new machines when needed. Already, it has claimed, a solid foundation has been laid for the city's industrial progress. So much was accomplished, in fact, that the closing of a big Douglas aircraft plant and the cancellation of many other manufacturers' war orders did not bother the city over as might have been expected.

• **Acts as Go-Between**—Unlike the Louisville Industrial Foundation, which since 1916 has been dedicated to the preservation of local payrolls (BW, Jun. 3 '44, p. 76), the Tulsa co-op has

capital fund with which to finance enterprises. Instead, it operates along the lines of the New England Industrial Development Corp. (BW—Aug. 11 p. 26), serving as a central agency to enable promising projects to find financial, technical, and other assistance. Like the New England group, Tulsa Industries, Inc., pays much attention to new inventions, seeking to establish markets for them whenever possible.

What Is Wanted—The group denies that it seeks to draw essential industries to Tulsa at the expense of other parts of the country. It does, however, seek industries which will hasten reconversion by rounding out the city's industrial picture.

Clyde A. King, manager, and Dean W. Given, sales manager, of Tulsa Industries, Inc., cite the case of the Knepper Mfg. Co. as an example of what the co-op is doing. Knepper, having general machine shop facilities, was reconverted to production of metal stampings when it was shown that Tulsa needed such a plant. The co-op got necessary machines from the Douglas aircraft plant, got marketing commitments from other Tulsa manufacturers, and helped in placing applications for financing the reconversion.

Tractor Test—Another type of operation is illustrated by a recent survey of

the market possibilities of a light, all-purpose farm tractor designed by a Tulsa man. The co-op sent out pictures and literature, and now says it has on file orders for several hundred tractors at a price of \$385, f.o.b. Tulsa. If final results warrant, a Tulsa manufacturer will be found to produce the tractors.

The co-op reports, moreover, that it has several agreements, near the signing

stage, for location of new factories or branches in Tulsa. In one instance, the site and buildings have already been obtained.

The organization, a nonprofit corporation, is financed by its members on a sliding scale according to their industrial stature. Fees range from \$50 a month, are credited against service commissions on business acquired.

Security Plan for Small Business

Wallace wants Commerce Dept. to provide little firms the technical know-how, financial and marketing guidance that will enable them to obtain risk capital and reduce mortality.

Small business has been a political football since the trust busting days of Teddy Roosevelt. In the intervening years both Republicans and Democrats, beating their chests and singing loud and long, have clamored for the votes of Main Street merchants. For this reason, when Secretary of Commerce Henry Wallace comes forth with a plan to "secure the future for small business" skeptical eyebrows are raised in Washington, and ears are cocked for the sound of hammering on a suspected political fence.

While Wallace has not yet presented his plan to the scrutiny of the Senate Small Business Committee, his under secretary, Alfred Schindler, hard-headed, punching feed salesman from St. Louis, has been promoting it here and there about the country. On Nov. 13 he gave Philadelphia's austere Centenary Assn. of the Chamber of Commerce and Board of Trade a keyhole view of its contents. This group liked it, in the main, but some businessmen expressed the hope that it would not turn out to be another dressing up of statistical studies dished out with soothing sirup.

Schindler promised "action—not just words," but these businessmen pondered whether the action did not come from the thin edge of the wedge.

• **Lack of Risk Capital**—The Philadelphia "Mainstreeters," who have conducted surveys of their own into the problems of small business, believe that the continuing high rate of mortality among this largest section of our economic structure should be attributed to the lack of risk capital and short-term credit.

Schindler professed the basis of the problem to be the "lack of know-how" on the part of the individual going into business. "Increase the know-how and you decrease the number of discontinuances," was his plugging point. His plan is to cure the disease by taking care to prevent it.

Although anything proposed to aid small business is politically suspect, the Wallace plan does not suffer from infirmity of purpose. The objective is to make the Commerce Dept. as useful to the small businessman as the Dept. of Agriculture's services are to the farmer.

• **High Mortality**—The Senate Small Business Committee has been racking its collective brains for years over the problem. Prewar figures on small business failures add up to 1,000 a day. While figures released recently by the Commerce Dept. show a steep reduction in



FROM ONE BATTLEFIELD TO ANOTHER

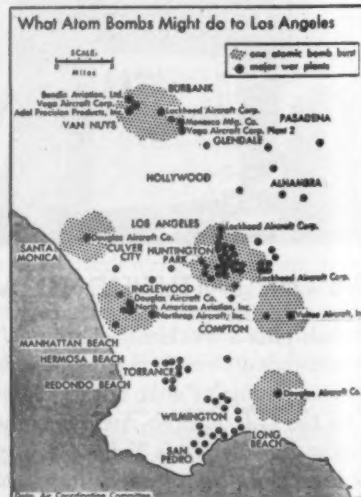
In Philadelphia a truckload of ribbon-bedecked veterans muster public sympathy and support for their attempt to wring an independent taxicab franchise from Pennsylvania's Public Utility Commission. At last week's hearing, spokesmen for the G.I. Taxicab Assn., membership 100, leveled charges of obstructionism at Philadelphia's Yellow Cab system, strongly asserted their "rights." A similar move is planned by a Negro veterans' group. Yellow Cab, strongly entrenched in the Quaker City, is slated to reply on Dec. 10.

• **Roots of the Theory**—"Qualitatively," the plan considers a small business one which cannot afford to employ or contract for adequate specialized management and technical aid, or which cannot

● **Seeks Loan Facilities**—That Wallace is aware of the weakness of his plan on this score is indicated by the strong back-room fight he is putting up to ac-

- **Data on Markets**—They also will provide businessmen with information on market sources, a month-to-month

More availability of floor space will not be enough. For maximum production as well as for security, the subcommittee recommends a dispersion program that would scatter the industry over the country instead of letting it concentrate in a few areas. To prove its point, it drew up a map of what half a dozen atomic bombs could do to aircraft facilities in the Los Angeles area.



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A White House atomic bomb meeting, temporarily out of order, is caught off guard by the camera. Seated (left to right) are: Clement R. Attlee, British Prime Minister; President Truman; Canadian Prime Minister Mackenzie King. Standing (left to right) are Dr. Vannevar Bush; T. L. Rowan, Attlee's secretary; Rep. Charles Eaton; Sen. Brien McMahon; Canadian Ambassador Lester Pearson; Secretary of State James F. Byrnes; Rep. Sol Bloom.

analysis of the general state of business activity and the influence of current economic trends on business as a whole as well as on specific business. In addition, monthly information would be sent businessmen on the latest economic opportunities within their areas.

On the matter of technical assistance to small business, the plan recognizes that one of the most compelling problems facing the small businessman is his inability to meet the challenges of scientific advancement constantly projected by big business.

To help the little fellow overcome this disadvantage, the Commerce Dept. would have its field offices aid and guide an entrepreneur in the introduction of new products, in the improvement of old products, in the introduction of new processes, and in the revising of old processes.

• **Close Liaison Planned**—A small business advisory group, which Wallace has been consulting informally, is partially responsible for the plan, and probably will be formally set up to work with an assistant secretary for small business, to be appointed as soon as Congress approves of Wallace's department reorganization plan.

The new assistant secretary's job would involve gearing the small business economy into the over-all machinery of business, maintaining a close liaison with a new assistant secretary for industrial economy. He also would be responsible for the operations of a new small business bureau in the department.

Leash for Atoms

Over-all policy for control of atomic energy draws little fire but piqued Congress leaders suspect plan is delaying tactic.

President Truman, Prime Minister Attlee of Great Britain, and Prime Minister King of Canada took the first tentative, cautious steps last week toward solution of the explosive problem of the atomic bomb and the harnessing of atomic energy.

• **Procedure Criticized**—Their joint pronouncement, issued in Washington after six days of intensive conference, provoked little criticism as to over-all policy.

But there were rumblings of discontent from congressional quarters on two scores: (1) the President's failure to consult key congressmen before making the announced commitments, and (2) a suspicion that certain procedures recommended in the "A-B-C (America-Britain-Canada) plan" were prompted by the Army's desire to engage in delaying tactics on disclosure of its closely guarded production techniques.

• **Safeguards First**—Representing the three countries "which possess the knowledge essential to the use of atomic energy," the conferees expressed willingness to share on a reciprocal basis with other United Nations detailed information on the practical industrial applica-

tion of atomic energy "as soon as effective enforceable safeguards against its use for destructive purposes can be devised."

This policy met with general approbation, as did their plan for utilizing the United Nations Organization as the ultimate authority.

• **Delaying Tactics?**—Not so favorably received, however, was the recommendation that the proposed atomic commission to be set up by the UNO should proceed with its work "by separate stages, the successful completion of each one of which will develop the necessary confidence of the world before the next stage is undertaken."

Suspicious that this procedure could well give the Army years of dominance over the atom bomb, critics said the possible delays in such a procedure might foster rather than allay international suspicions.

• **Leaders Piqued**—With the House due to consider the May-Johnson atomic energy bill shortly and the special Senate committee on atomic energy scheduled to begin hearings on the same measure within a few days (BW-Nov. 10 '45, p 17), many congressional leaders felt they should have been consulted before such a momentous step was taken by the President.

The May-Johnson bill undoubtedly is dead, at least in its present form, these critics say, but Congress must evolve a national policy on atomic energy. And, more importantly, Congress must pass on any international commitments of this nature, hence should enjoy the full

confidence of Truman from the start.

• **Outlawed as Weapon?**—Noteworthy in the Truman-Attlee-King statement is its recommendation for "the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction." Conceivably this could be applied to outlaw use of V-1 (robot) and V-2 (rocket) bombs which the Nazis introduced.

Other subjects on which they asked the proposed UNO atomic commission to make proposals covered (1) extending between all nations the exchange of basic scientific information for peaceful ends; (2) control of atomic energy to the extent necessary to insure its use only for peaceful purposes; and (3) effective safeguards by way of inspection and other means to protect complying states against violations and evasions.

• **Inseparable Techniques**—A major obstacle to the industrial application of atomic energy, the conferees made it clear, is the fact that its military exploitation depends, in large part, upon the same methods and processes. Hence, to reveal the former would give away the latter.

In the light of these developments, the UNO General Assembly meeting scheduled for Jan. 2, 1946, to appoint a Security Council, assumes added importance.

Milk Reconverts

Dairy farmers' big problem is one of developing a civilian market that is able to absorb war increased production.

Dairy farmers, never reticent about trumpeting their troubles to a listening world—and attentive congressmen—are apprehensive about their own brand of reconversion.

Specifically, that means finding a civilian market for their wartime milk production, thus keeping their post-war income at somewhere near the wartime, all-time, high. The 1945 cash return to dairy farmers, including production payments, is figured at \$3,500,000,000, which is more than double their prewar take.

• **Price Fear**—Farmers' nightmare during the lush war years was that peacetime reduction of government purchases would break milk prices. They remember the aftermath of the first World War, when wholesale milk sank to \$1 per cwt.

That's not likely to happen this time, because of the government guarantee to support prices at 90% of parity for

two years after the war's official end. But dairy farmers knew that their long-range prosperity depends on getting civilians to absorb most of the war increased supply of milk and milk products.

• **What's Ahead**—This year U. S. production of fluid milk will total 122 billion lb.—an all-time high and an increase of 15 billion lb. from 1939. Next year government purchases, which this year represented about 12% of the total, will go down. Milk used for evaporated and dried whole milk, for example, will be cut by three or four billion lb. because of reduced military and government export demand.

Furthermore, total milk production is expected to decline by 1% to 3%. Current surveys show fewer dairy cows on farms than a year ago, and the output per cow probably will decrease from its present peak level.

• **Consumer Income Factor**—Nevertheless, that will leave a whopping quantity of milk to be marketed in 1946. However milk consumption and milk prices traditionally are influenced directly by consumer incomes. In this war-prosperous year, for example, per capita fluid milk consumption reached the all-time high of 441 lb.

Dept. of Agriculture economists, assuming continued high consumer incomes next year, predict a fairly balanced supply and demand for dairy products, with only a slight decline probable in farm income. They expect that consumption of fluid milk and cream, now running about 25% above the prewar rate, will continue undiminished or even rise slightly in 1946.

• **War-Developed Appetites**—One factor is the return of servicemen with their appetites for milk considerably sharpened. Demand for cheese, canned milk, butter, and ice cream, kept down during the war by restrictions on processors and rationing to consumers, should also be at top levels next year.

Underlying the complex economics of the dairy industry is the fact that its raw material, in its fresh form, is extremely perishable. About half the milk produced in the U. S. is consumed as fluid milk, the rest in various milk and cream products.

• **Complicated System**—Over the years, a complicated system of marketing practices, trade regulations, and price relationships has developed (BW—Nov. 3'45, p83). A change in the demand for one dairy product is inevitably reflected in the others.

Granted that the immediate market for milk is not endangered, the big question mark in the long-range picture is future government policy. Wartime trends in the country's utilization of its fluid milk supply (BW—Jul. 21'45,

Wisconsin Opens Door to Dried Skim Milk

One-pound packages of dried skim milk are now being triumphantly offered to Wisconsin housewives by Farm Products Distributors, Inc., of Madison, after a legislative change of heart.

Since 1915, the state has prohibited the sale of nonfat dried milk solids—the official name for dried skim milk by Act of Congress (BW—Mar. 4'44, p101)—in less than 10-lb. containers. The law had the effect of discouraging household use, and it remained in spite of the fact that in 1942 Wisconsin produced about 30% of the nation's total output of dried skim milk.

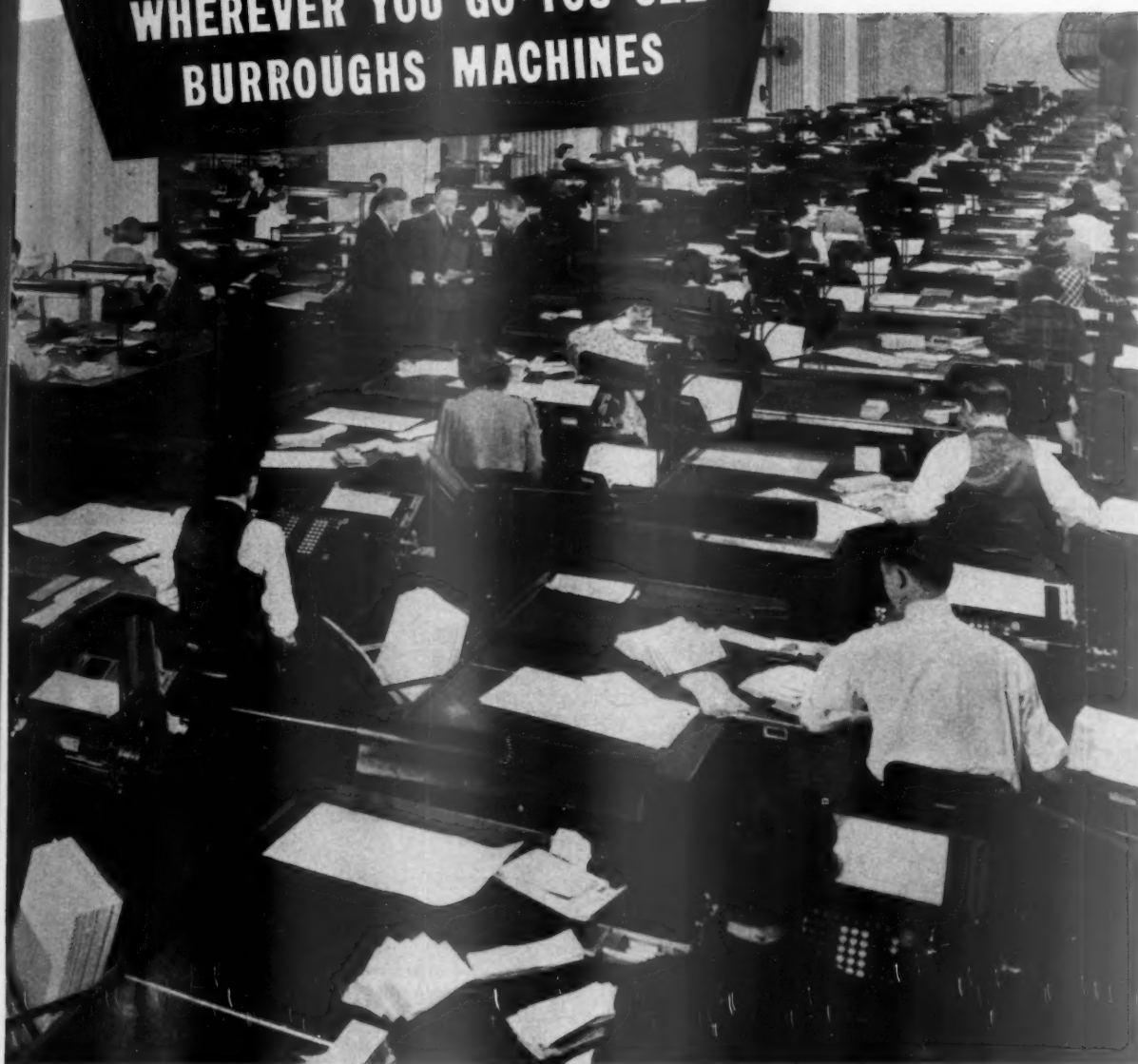
This year, anxious to find additional markets for its expected oversupply of milk from herds built up to record numbers by wartime demand, the state legislature revised the law. This is a moral victory for Mrs. Dorothy Lee, ardent lobbyist for the change, and also secretary-treasurer of Farm Products, which now distributes dried whole milk through 13 Madison outlets.

But demand so far has been mod-

est—possibly because consumers find it easier to have fluid milk delivered to their doorstep for 13¢ a qt. than to follow Mrs. Lee's formula: 1 lb. of dried skim milk @ 35¢ reconstituted with water to 5 qt. of fluid skim milk, with 1 pt. of coffee cream @ 27¢ (delivered) added to make a reasonable facsimile of fluid whole milk.



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YOU want a part for your new product—a housing, a gear, a knob, or other sort of "gadget."

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* BUY VICTORY BONDS *

R *Plastics Division* R
ERIE RESISTOR CORP.
ERIE, PA.

p93) have demonstrated how effectively Washington juggles end-uses of milk when it sets its mind to it.

• **WFA's Policy**—The War Food Administration took the position that the most economical use of dairy products would be obtained by getting farmers to market whole milk, rather than separated cream with the skim milk left on the farm for animal or chicken feed.

Consequently WFA paid higher production subsidies for whole milk than for cream (BW—Feb. 24 '45, p55), and price ceilings were set to give the farmer a better return for whole milk than for milk sold as butterfat.

• **Results**—Restrictions on sales of cream and ice cream boosted farm sales of whole milk at wholesale to 69 billion lb. in 1945—five billion lb. above 1944 and more than double the volume in the early 1930's. Such devices helped the government to meet the tremendously increased wartime demand for milk in forms that could be easily kept and shipped—dried whole milk, nonfat dried milk solids (skim milk powder), canned milk, and cheese.

Now comes reconversion. Biggest unknowns in future government policy, any of which could throw the delicate milk equation out of balance, are (1) duration of price ceilings; (2) extent of the reduction in government buying for foreign relief and services; (3) abandonment of production subsidies.

• **Production Payments**—Farmers want subsidies ended while consumer pocket-books are still full enough to take higher prices—and even if this is done, they are not sure that consumers won't balk at the increase. Production payment rates have been announced through Mar. 31, 1946, with funds appropriated to carry through to the end of the fiscal year. But between now and July 1, 1946, Secretary of Agriculture Clinton P. Anderson hopes to get rid of all production payments.

Shifts in milk use are already appearing as government buying shrinks. For example, lifting the ban on cream sales caused a rush of cream to eastern metropolitan markets. So great was the rush, in fact, that—in conjunction with a seasonal shortage—it threatened to cut into New York City's fluid milk requirements. Mayor LaGuardia, therefore, reimposed the ban on heavy cream.

• **Butter Reversal**—Sweet cream used for the manufacture of ice cream or sold as heavy cream brings 60¢ to 70¢ per lb. in the current market; 10¢ to 20¢ over the price of butterfat for butter. Hence, butter output, which had been rising in July and August, reversed its trend. October production was 4% to 6% less than that of October, 1944.

Outlook for major manufactured milk products next year is varied:



FOR RELIEF

Assistant Secretary of State William L. Clayton (left) clarifies a point for the House Foreign Affairs Committee on the proposal to vote more funds for United Nations Relief & Rehabilitation Administration. Clayton registered a vigorous "thumbs down" last week on Republican counterproposals to provide relief through some American agency, backed President Truman's request for the balance of the original \$1,350,000,000 U. S. commitment.

• **Butter**—From 1941's bumper 1,872,000,000 lb. of creamery butter, the 1945 output fell to 1,450,000,000 lb., a 20-year low. Despite this shrinkage, butter rationing is expected to end by December.

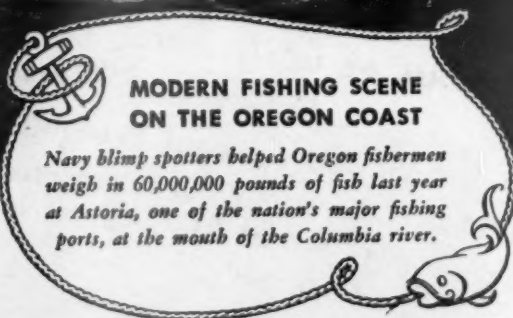
Fairly adequate civilian supplies are foreseen as the result of release of 100 million lb. of Army stocks, added to current trade stocks of 60 million lb. and the normal rise in production as the winter wears to its end. Another factor will be rechanneling to the creameries of milk that has been going to evaporators and dehydrators.

Brisk consumer demand is expected to keep butterfat prices at or close to present levels. The higher prices resulting from removal of the five-cent processors' subsidy will probably do little to retard this demand.

• **Cheese**—Government commitments for sale overseas of 160 million lb. will keep cheese in tight supply until

Oregon

WHERE FISHING INNOVATIONS
ADD TO RECORD CATCHES



U.S. NAVY PHOTO

"Eyes in the skies" is only one of the unusual means used by Oregon's enterprising commercial fishermen to insure a constant catch of tuna, salmon and other fish each season.

Skilled fishermen, alert for new aides in gathering more seafood, were assisted during wartime by the Navy's lighter-than-air base at Tillamook. Blimps on patrol off Oregon's 400-mile shore spotted the great fish boats and radioed locations to 2500 small fishing craft.

The inconsistencies of "fishermen's luck" have been overcome further by a long list of expedients proved advantageous by experience. As a result, Oregon deep-sea and fishing produced an income of \$30,000,000 last year.

The industry gives employment to approximately 10,000 fishermen and to more than 8000 cannery workers, processors and distributors. Employment is expected to reach an even larger figure by purchase of supplies, boats and equipment.

Oregon's world-famous salmon now are second to an annual albacore tuna pack worth \$10,000,000. Freezing processes send bottom fish to an extended market. Fish livers, once waste, now provide vitamin A concentrates.

With 90% of fishing income from out-of-state sales, each dollar contributes to increased stability of the Oregon market. Truly, Oregon's river and coastal waters are a vast reservoir of perpetual wealth.

ONE NEWSPAPER ALWAYS LEADS...IN OREGON IT'S

The Oregonian

The Great Newspaper of the West—Portland, Oregon

REPRESENTED NATIONALLY BY PAUL BLOCK & ASSOCIATES

YORK SAFE and LOCK COMPANY

MEMO: To Our Friends —
Old and New

After more than five years devoted almost 100% to the production of guns, gun mounts, tank parts, fuses, shells and other ordnance items for the U.S. Army and Navy, we are happy to announce the return to York quality manufacture of (A) bank vault equipment, including bank vault doors, linings, safe deposit boxes and locks, night depositories, lockers and related equipment; and (B) fire-resistive safes and vault doors and burglary resistive chests.

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P.S. We are also equipped to engineer & produce your special machinery requirements. Write for free 38-page booklet describing our facilities for this type of work



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Washington

after Jan. 1, 1946. As civilians get access to increased quantities, processes and improved types of milk are counted on to raise per capita consumption from the prewar 6 lb. to 10 lb.

• **Evaporated Milk**—Government purchases shot up evaporated milk from 56 million cases in 1940 to 100 million cases in 1945. Civilian purchases in 1946 are expected to be between 56 and 60 million cases, but imposed upon a government demand yet unknown. Any milk beyond processors' forecasts of what they can will go back to the creameries.

• **Dried Milk**—Production of whole milk skyrocketed: In 1940 it was 29 million lb.; in 1945 (eight months) 167 million lb. Skim milk powder increased from 321 million lb. to 400 million lb. in the same period.

With production facilities at twice those required for prewar volume, no certain forecast can be made about the future of this production. There are two alternatives: (1) great increase in exports and (2) use by bakers, candy makers, and cream manufacturers, and (2) development of consumer markets.

One processor, Kraft Cheese Co., has charted the latter course, has developed and market-tested a version of whole milk powder, and it hopes will become a grocery store staple. Heretofore this product has had limited distribution because it required relatively expensive packaging in metal containers with inert gas, to prevent fat from turning rancid. Kraft thinks inexpensive glassine-and-cardboard packaging will lick this problem.

• **"Drink More Milk"**—Plans are being pushed to keep peacetime consumption up to postwar milk production by a national advertising campaign through the American Dairy Assn., by improved merchandising in retail stores, and also higher quality standards for all dairy products.

URBAN LAND STUDY

Growing importance of and interest in the twin subjects of urban centralization and city planning led Columbia University to establish a chair of "urban land economics." Ernest M. Fisher, at present director of research in real estate finance of the American Bankers Assn., has been appointed to the post.

Fisher's job will be twofold. His graduate course and research seminar under his direction will train men for the growing job of planning urban development, and at the same time explore current problems in this field.

The New York area will serve as primary laboratory for the courses.

SKF
Puts the
RIGHT BEARING
in the
RIGHT PLACE



FROM TEA TOWEL TO TARPAULIN

... The electric sewing machine your wife runs so daintily and the huge spinning frame of the modern textile mill seem pretty far apart. Yet both the great and the small unit have turning wheels and whirling shafts, and present their own particular problems of speed and load and thrust.

SKF has been solving both sorts of problems for many years, for SKF made the "original textile

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Large repeat orders are responsible for hundreds of thousands of SKF units in the mills throughout America today. For when executives personally observe the saving in power and maintenance which SKF Ball and Roller Bearings provide, they re-specify them for all their new equipment.

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Tooling-up and assembly economies are our forte. We add ingenuity for good measure. Our capacity and 26 years of contract manufacturing experience should be as facilitating and profit-lengthening for you as for all the other industrialists we cooperate with. Let me send you our war-produced book, "INGENUITY."

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Patent Grab Bag

International Harvester Co. offers nonexclusive licensing of more than 1,000 patents to all comers through Ooms' file.

First major move by Patent Commissioner Casper W. Ooms (BW-Jul.21'45,p7) was to create a public file of patents available for licensing. First big manufacturer to make a wholesale addition to this list was International Harvester Co.

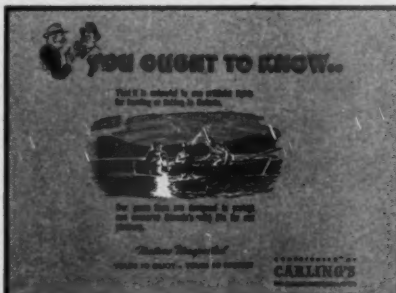
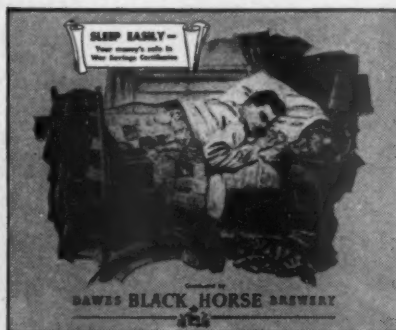
• **Patents Up for Grabs**—Late last month Harvester told Ooms that, of the 1,243 patents which it owns, more than 1,000 would be listed for non-exclusive licensing to all comers "for a reasonable consideration." I.H.C. also promised to prepare a pamphlet abstract of its licensable patents, and to mail this on request to anyone interested. Mail is already piling in on this.

All of the other patents the company

now owns will be added to the able list from time to time without years. Hereafter, the corporation's policy stipulates, it will keep a patent to itself only long enough to mine through engineering and development whether the new invention the company's needs, and to get head start in recovering initial expense and tooling costs, never more than five years.

I.H.C. management, always alert to public relations implications, was alerted to introspection by the Temporary National Economic Committee's well-aimed kicks at "patent suppression" (BW-Jul.23'38,p7). The company held many "defensive" patents intended to forestall any attempt by others to prevent it from using its own inventions. Also it had many obsolete patents.

• **Those Unused Patents**—Both of the categories were already being licensed to all comers, but more than 700 unused. On the bare statistics, the company could be accused of patent suppression. Ooms' licensing list



Men who think of tomorrow say
"Hold on to your Victory Bonds today"

THE HOUSE OF SEAGRAM

BUMPER CROP ON ONCE BARREN GROUND

Prohibited because of war paper shortages and rationing from advertising their wares, Canada's brewers and distillers proved there's more than one way to skin a cat. Basing ads on everything from game law regulations (below left) to plugs for Canada's war bonds (above and right), the liquor and beer people launched an unprecedented advertising drive. Previously beer and liquor advertising was permitted only in publications printed in Quebec and British Columbia; now, because beverages are not mentioned, the ads are on billboards and streetcar signs everywhere, in 86 dailies, 17 magazines, 16 fan publications. And there's no indication that the distillers and brewers, having blazed new trails, will alter their copy when war restrictions come off.

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ess.
The new commissioner, a Chicago
attorney, was well and favorably
on to the company's legal staff.
talked it over on one of Ooms'
back home. He felt it would
then his campaign to make the
ent patent system work within
ically practical limits. Harvester's
ctors approved the plan.

Installing Compulsion—Money re-
ed or paid out by Harvester on
its licensed is chicken feed in the
oration's total operations. But
pany executives recognize that
ical trends mean that the patent
m is going to be loosened up by
means or another, and its move
s Ooms ease Washington pressure
ompulsory licensing.

The company agrees with his belief
forced licensing of all patents
d probably do little harm to big
orations, but it could force out of
ness many a small corporation
ch withstands the sales and pro-
ion pressure of its big competitors
y by its few but vital patents.
number of other large corpora-
s, Ooms reports, are on the verge
following Harvester's lead.

W GENEVA CONTRACT

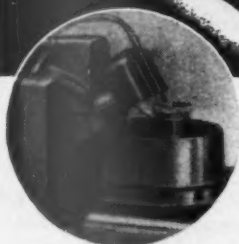
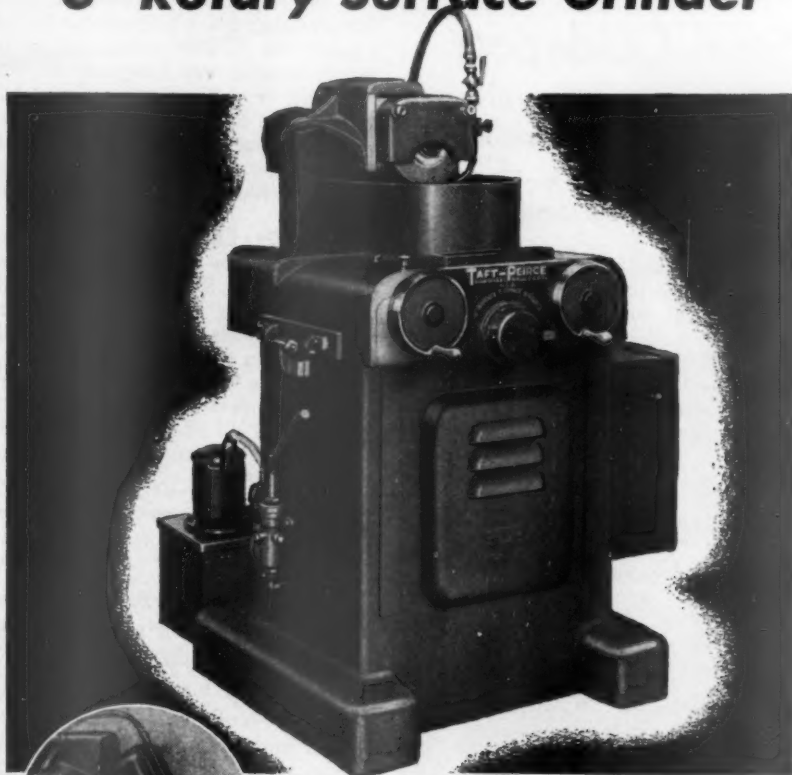
While disposal of the \$200,000,000
eva steel plant as government sur-
property is still a moot question,
bitterly fighting proponents of the
h mill as the center of a western
l industry were given only a crumb
satisfaction last week by a new
tract with United States Steel Corp.,
ending operations for eight months.
Supporters of a western steel empire,
e objected to purchase of Geneva
the Henry J. Kaiser interests or by
Colorado Fuel & Iron Corp. (BW-
o.22'45,p30) because they don't want
to have the status of a pig-iron plant,
that is about what the new contract
s for. It provides for operation of
y one blast furnace, one battery of
e ovens, the power plant, and the
al mine.

The number of workers at the plant
s been reduced from more than
000 on V-J Day to about 700. How-
er, Geneva proponents are fighting for
ished steel, not so much for the pay-
ll maintained at the plant as for the
velopment of the satellite industries
thin the trade area.

Meanwhile, miners at Geneva's cap-
e mine in Horse Canyon, Carbon
ounty, protested against a drive of
tah coal producers to close the mine
cause it was selling its surplus coal,
ot needed for Geneva coking, on the

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Exclusive Taft-Peirce tilting wheelhead makes it easy to maintain accuracy on difficult angle and shoulder cuts like the one shown above. For the entire spindle swivels about the wheel center through an arc from horizontal to 30° below center — so that a quick adjustment of the spindle-block simplifies operations which otherwise require difficult and slow tool set-ups.

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the special Taft-Peirce Superpower Rotary Magnetic Chuck enables you to hold extremely small pieces in the center of the face-plate. Work spindle is supported in a trunnion mounting, which permits swiveling the chuck forward or to the rear to a 7½° angle. This facilitates the grinding of saws, cutters, gear-shaper cutters, and similar tools. All these features add up to the highest obtainable standards of accuracy, flatness, and finish in grinding plane surfaces of small parts and tools. Write for a copy of the new publication on this unique machine.

THE TAFT-PEIRCE MFG. CO., WOONSOCKET, R. I.



open market. While miners have been shutting down mines all over the country by strikes, the Utah workers have entered the fight to keep a mine open. At midweek the Horse Canyon coal mine was still operating with its full force and still selling its surplus on the open market.

Steel Guidepost

Sharon's purchase of Farrell works from Carnegie-Illinois interests observers of trend toward full integration.

Searchers for peacetime trends in the steel industry took more than passing notice of the announcement last week that Sharon Steel Corp. had purchased the Farrell works of Carnegie-Illinois Steel Corp., U. S. Steel subsidiary.

• **Integration**—For the purchase put Sharon into the integrated steel company class, and it marked Sharon as one of the first "little" steel concerns to get

rid of old equipment (Sharon's plant at Lowellville, Ohio, will be closed) in favor of newer facilities. Significant also is the fact that a plant which to Carnegie-Illinois is old, and hence disposable, is considered by Sharon to be a good investment.

The Farrell works, adjoining Sharon's finishing units in Sharon, Pa., gives the purchaser two blast furnaces with a capacity of 520,000 tons, 15 open-hearth furnaces with a capacity of 750,000 tons of ingot a year, plus a full complement of rolling mill equipment for turning out semifinished steel. Office buildings, an ordnance plant, and incidental facilities are also included in the sale.

• **Completes Line**—With two electric furnaces and new soaking pit capacity to be constructed, Sharon will have facilities for making a full line of carbon, stainless, and alloy steels. Also, it will be in position to supply its subsidiaries, Niles Rolling Mill Co., Niles, Ohio, and Detroit Seamless Steel Tube Co., with much if not all of their needed steel. Formerly the two had to make extensive outside purchases.

Sharon will take over the Farrell works on Dec. 15, and by that time both its blast furnaces, which were shut down during the recent coal strike (Oct. 27 '45, p107), will be operating again.

• **Roemer's Move**—The Farrell purchase marks another turning point in the career of Sharon's president, Henry Roemer. Head of the company since 1931, he also served as president of Pittsburgh Steel Co. from 1936 to about a year ago. Then he got into dispute with the J. H. Hillman, Jr. interests, big stockholders in Pittsburgh. As a result he exchanged much of his holdings in Pittsburgh Steel for an equivalent amount of Sharon stock by the Hillman group. The current move is his first major step since gaining an increased voice in Sharon's operations.

Trim Waste Line

Prodded by wildlife law to end stream pollution, paper industry is getting big tonnage yield of byproducts.

Pulp and paper manufacturers have been under the bed nightly, lest organic outdoorsmen be lurking there with snickersnee. Reason for this apprehension is a situation which the industry deplores as deeply as the wildlife conservationists.

• **Use for Wastes Sought**—To the fishermen and hunters it is a simon-pure case of stream pollution. Mill men regret it as the cause of their unpopularity in sporting circles.

Less immediately pressing, industry technicians recognize, but in the long run more significant, is the economic problem. Until they find profitable use for the mill wastes that now run down the rivers, they are sending dollars down the sewer.

The industry has invested huge sums through years of research, still has not licked the job. But developments of recent weeks hint that solution of the problem may be close.

• **Progress in Wisconsin**—Most acute difficulty is that of the sulphite pulp mills. For some years a group of Wisconsin sulphite mills has been working hard on the entire set of related problems. Last month a move by two industry bodies disclosed that solid progress has been made. Significantly, they split the field into two jurisdictions and doubled the total effort.

Hereafter the Sulphite Pulp Manufacturers' Committee on Waste Disposal of Wisconsin has as its job to



FOR THE PEOPLE

Definitely interested, Britons contemplate a 3-cylinder car which William Kendall, M.P., is starting to produce, intends to sell for \$400. Not unlike Germany's Volkswagon, Kendall's car has its air-cooled power unit in the rear (left), baggage space under the front hood, hydraulic snubbers instead of springs, seats four. Utilizing its own heat and gases for extra power, the engine is a single unit with gearbox and transmission, claims 40 mi. to the gallon. In order to reduce license costs, the car's weight has been trimmed down to about 1,000 lb.



A Letter from the Governor of New York



THOMAS E. DEWEY
GOVERNOR

STATE OF NEW YORK
EXECUTIVE CHAMBER
ALBANY

To all Companies Planning Expansion in the East

Gentlemen:

If your company is one of the many looking for an Eastern location, or planning to expand in the East, I urge you to make use of an unusual and valuable business service offered by the Department of Commerce of the State of New York.

We are equipped to give you concrete information on available plant sites, warehouse locations, and office space in this state. The purpose of our service is to supply your executives with detailed information on such locations, together with other relevant business data, as applied specifically to your company.

Such information will help you size up New York's valuable markets, transportation facilities, manpower resources, and other advantages—from the standpoint of your business.

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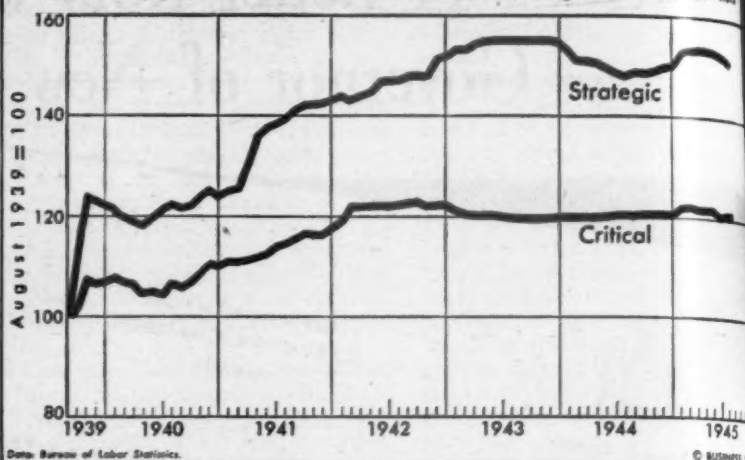
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WHAT WE PAID FOR WHAT WE NEEDED MOST

A picture of prices for items on Uncle Sam's wartime "Strategic" and "Critical" lists



Data: Bureau of Labor Statistics.

© BUSINESS WEEK

Prices of the materials most necessary for all-out war production might have been expected to go sky high. They did, in fact, go up rapidly until after the United States got into the war. But, once price ceilings were clapped on American markets, things stayed put pretty well, as these special indexes prepared by the Bureau of Labor Statistics show. It should be remembered, however, that the government paid more for materials it imported (tin, for example) than it sold them for in the home market—the trading loss amounting to a subsidy paid foreign producers in order to stimulate production.

zation studies aimed at finding useful products in the mill liquor now thrown away. Disposal studies, aimed at abating the industry's pollution of rivers, have become the province of the National Council for Stream Improvement of the Pulp, Paper & Paperboard Industries.

• **Gargantuan Problem**—What makes the utilization problem awesome is its size. For every ton of wood converted into pulp by the sulphite process alone, another ton is discarded—most of this is lignin and wood sugars in waste liquor. More than 2,000,000 tons of solids per year are thus run into the stream, dissolved in uncountable billions of gallons of water.

Industry researchers agree that no single utilization can be adequate to dispose of this huge tonnage. Dozens of large-scale uses probably will be required before only water goes back into the stream at all U. S. mills.

Example: Marathon Paper Corp., Rothschild, Wis., makes vanillin from sulphite liquor. Marathon's vanillin department uses only a fraction of the one mill's waste liquor tonnage, but still it has enough capacity for the entire United States consumption of this flavoring material.

• **Promising Projects**—Researchers are optimistic because they keep finding ways to reduce production cost of

vanillin. Present expectation is that it may be pulled down far enough to permit using vanillin as an intermediate from which to develop an entire field of chemistry. Vanillic acid esters and ethyls show good possibilities for nontoxic preservation of foods, including fish and hams. Such a development could turn a small but appreciable fraction of sulphite liquor to good use. The eventual effect of such chemical processes upon stream pollution problems remains to be explored.

By far the most promising project in view is the sulphite pulp group's livestock feed research at the Institute of Paper Chemistry, Appleton, Wis. This is already in the pilot-plant stage and is probably less than a year from commercial production. The problem from here on are primarily mechanical, not biological, as they were at the start of research.

• **Proteins From Waste**—Industry researchers have processes that obtain feed yeast and feed proteins from waste sulphite liquor at competitive costs. These products are especially high in vitamin content. Only one amino acid is missing from the proteins, and this is easy and inexpensive to supply.

Stockfeed from pulpmill waste is old stuff in Europe. The Germans channelled practically all available capacity during the war to making feed for dairy

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horses. But European processes of making yeast products and ethyl alcohol from paper industry materials cannot compete against Cuban blackstrap molasses and other cheap raw materials available here.

The new American process uses a torula yeast, not a true yeast such as is used in the ethyl alcohol industries. The resultant feed has shown up well in tests for palatability to livestock. One advantage claimed is that it lacks the bitter flavor with which brewers must contend in their stockfeed production.

• **Costs Competitive**—The sulphite group believes it can produce its feed at costs comparable with any other source of protein for livestock, and that its product has the added advantage of the vitamin content. To beat the new process, say its developers, blackstrap would have to drop below the 6¢ minimum price that they consider probable for their product.

Wisconsin pulp mills that supported this research can produce 25,000 tons of feed yeast and feed proteins by this process, once the plant capacity is built. The entire sulphite pulp industry could supply 100,000 tons. The Wisconsin dairy industry offers a handy market for the local mills.

Sulphite liquor is too bulky for shipping. Hence each pulp mill would have its own fermentation plant, and would transport the resultant yeast cream to a central factory for finishing and marketing.

• **Alcohol Project**—Another waste liquor project that pulp men hope will prove economically sound is production of ethyl alcohol in the Northwest, which is advantageously remote from Cuban sugar centrals. A plant to make 2,000,000 gal. annually began operations at Bellingham, Wash., early this year. If it can compete in peacetime and dispose of its product profitably, it will help with the over-all sulphite liquor problem. This process bears no relation to that used in the plant of the Willamette Valley Wood Chemical Co. near Eugene, Ore. (BW—May 5 '45, p. 64), for the manufacture of ethyl alcohol from hydrolyzed wood substance.

Recent developments in waste liquor utilization include findings that it can be used in the production of penicillin and the sulfa drugs. The Marinette Paper Co. sells sulphite liquor to the city of Marinette, Wis., to lay dust in unpaved streets and a few other plants in other areas do likewise. Several plants are using waste liquor in other ways. In general, because of its bulk, they either concentrate it or precipitate the dissolved solids with which they work. But the aggregate of all of these uses is small alongside the potential of the big-tonnage stockfeed program.



STILL IN THE RUNNING

As a reminder that—like Switzerland's Geneva and South Dakota's Black Hills (BW—Oct. 20 '45, p. 36)—it aspires to be the home of the United Nations Organization, San Francisco has issued special "invitations" to the UNO Preparatory Commission. Six handsome albums, illustrated with local scenes, have been sent by express to London as a hint that the Golden Gate city has as much to offer as it has to gain.

• **Sugars Make Trouble**—The National Stream Improvement Council that now handles the research into waste liquor disposal (as contrasted with utilization) includes in its membership more than 80% of total U. S. pulp, paper, and paperboard output. It is continuing to work on long-established programs that promise to abate, at not excessive expense, the industry's worst problems of stream pollution. These methods, river aeration and the trickling filter technique, were developed and are still being carried on by paper technicians and the state of Wisconsin's sanitary engineer working through the Institute of Paper Chemistry.

Contrary to general impression, the industry's waste liquors are not toxic. What makes trouble are the dissolved wood sugars, which so stimulate growth of micro-organisms, already in the river, that in still or small waters these may reduce biological oxygen below levels needed to sustain fish life.

• **More Air for Fish**—Flambeau Paper Co., Park Falls, Wis., has the pilot installation of river aeration. Large volumes of air are bubbled through the Flambeau River here, thus satisfying the oxygen deficiency and making enough available to support both the biological oxidation and the fish.

Consolidated Water Power & Paper

...s mill at Appleton has the first 5-ft. trickling filter in operation. As waste liquor here cascades over a bed of stones in thousands of tiny trickles, a quantity of biological oxygen is so augmented that there is enough to maintain the stream's content at its normal quantity of oxygen.

Man Against Rats

Effective new poisons found to help wage war on rodents. One so poisonous that control by government is recommended.

Mankind has acquired two new weapons to help wage one of the oldest and most unsuccessful wars in history, that against the rat hordes that do annual damage of \$200,000,000, and carry plague.

Black Rats Hardest—ANTU, a gray powder so poisonous that a pinch will kill thousands of the Norway rats commonly found in our northern cities, is the discovery of a psychiatrist at Johns Hopkins Hospital, Baltimore.

Chemicals composing the poison are alpha-naphthyl thiourea. They cause a dropsy of the lungs which drowns the rodent in its own body. It does not kill humans, or dogs, and is easily dusted on bait or runways. Unfortunately it does not kill the black rats most commonly found in southern cities. It is being manufactured by E. I. du Pont de Nemours & Co.

Deadly to Humans—"1080," the highly toxic and almost odorless poison developed by a conscientious objector working for Fish & Wild Life Service at Bowie, Md., is a far more lethal weapon. (The name records the number of chemicals tested by the government in a two-year search for a rodenticide to replace strychnine and red squill which became scarce during the war.)

Although no "1080" is commercially available yet, because it is lethal to humans, hard to detect, and dangerous to use, Monsanto Chemical Corp., the sole manufacturer, has supplied it to the government agencies. Several cities have tried it, Dallas, Fort Worth, Houston, Kansas City, Mobile, Buffalo, and Manila among them, and report great success. Users wear gloves and masks.

All kinds of rodents and other animal pests succumb to "1080." It is used in drinking water or on bait. It is socially dangerous because its symptoms would probably cause a doctor to diagnose a poison murder as colitis. Strict government control of "1080" has been recommended by Secretary of Interior Harold L. Ickes.



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Clinics Prosper

Future of group medicine, reducing cost of specialists, has bearing on moves to put government in health business.

How far the war-induced boom in group practice of medicine will collapse with demobilization of military physicians and a slump in mass purchasing power is one for the oracles, but the answer will interest lots of people, from city planners to lawmakers.

• **Mayo Pattern**—Group medicine—the integrated, clinical practice of medicine by aggregations of specialists who utilize common laboratory facilities and who make themselves mutually interdependent for consultation—is far from being unknown in this country, but it is hardly common.

Perhaps the best known such group is the Mayo Clinic, at Rochester, Minn., where integration is complete, unlike such other well-known medical centers as at Johns Hopkins in Baltimore, and in New York and Philadelphia. Other major examples of group medicine are Boston's Lahey Clinic and the Cleveland Clinic. Perhaps 50 other, smaller clinics are in business.

• **Land-Office Business**—Mayo people concede the obvious—that they have been pushed hard during the war. The clinic's 1945 registration may reach 130,000 patients, or almost 33% above that in 1941. Comparable centers have been similarly flooded.

Aside from the obvious fact that the U. S. public has had money to spend on medical care, a principal explanation of the heavily increased patronage of group medicine is that such centers have

MIGHTY MITE

Light enough to be carried by a man, a baby jet engine unveiled this week by Westinghouse weighs only 145 lb. yet packs a power output of 275 lb. of thrust—equivalent to 275 hp. at a speed of 375 m.p.h. Designed to propel an Army "buzzless" buzz bomb, the engine may be adapted—possibly with addition of a propeller—for aircraft cabin supercharging, wing deicing, and powering personal planes. Also making its debut, another Westinghouse jet engine is twice the diameter of the baby, but develops five times the thrust for Navy fighters (BW—Jan. 6'45-p71).

had the doctors. Before the war, the country had achieved a pretty good distribution of medical men. Two years after the armed services started to expand rapidly, 60,000 physicians or more had been removed from civilian practice. Whole areas, sometimes states, were left without specialists in some of the less common fields. The centers themselves were hit hard, but the removal of a large percentage of doctors from the huge medical center still leaves more talent on hand than does the withdrawal of even a smaller percentage of the physicians in a four-doctor county.

• **Peacetime Expansion**—Even when the physicians in uniform are back in civilian practice, Rochester, home city of the Mayo Clinic, looks for a continued expansion of the flow of visitors and the lucrative trade attendant upon them. Expansions either under way or awaiting the chance to start include a \$500,000 addition to a large cooperative dairy plant; a \$1,800,000 expansion of the school system; a \$3,500,000 beginning of what is ultimately to be a \$6 million hospital; a \$1 million city sewage disposal plant addition.

The clinic is looking to the construction of a new building "in four or five years." Its present home, designed and built in 1929 to accommodate 100,000 patients yearly, has been overcrowded for some time.

• **Service, Within Reach**—What happens in peacetime in Rochester and other medical centers will be of interest to those who legislate and lobby for or against mandatory health insurance proposals.

Just as the automobile industry, as presently constituted, can bring car prices within the reach of more Americans than could an industry of 500 local automobile makers, so institutions comparable in technique if not in size to the



yo, Lahey, and Cleveland clinics bring the intricacies of modern medicine within the reach of more Americans than could otherwise afford the present-day aids to diagnosis and treatment.

Postwar Barometer—Hospital insurance plans, and the young but similar medical insurance plans, along with any other privately controlled device which makes broader medical care more widely available will slow down those who argue that "socialized" medicine is inevitable. While group practice, as represented at Rochester and elsewhere, is not precisely the answer which the American Medical Assn. would advance against "socialized" medicine, it more nearly approximates the A.M.A.'s wishes than does the Wagner-Murray-Dingell bill, legislative favorite of the New Deal. That bill would put the government much farther into the health business than it now is.

Thus, those who have an interest in such things will be watching the postwar performance of group practice, as well as the other devices which hold promise of doing the job which would render the issue of "socialized" medicine academic.

Sets for the Hams

Radio's amateurs keep one segment of industry from having reconversion jitters. Expansion by Hallicrafters is significant.

At 3 a.m. on the morning of Nov. 15 the wartime blackout ended for the radio hobbyists known as "hams" and at 3:01 the air was cluttered with messages from one amateur to another.

For the few manufacturers who specialized before the war in building sets for the hams, there was no wartime blackout. They operated at capacity on Army and Navy orders. Consequently, these manufacturers, unlike those who made only orthodox receiving sets, now face no reconversion problem.

When peace came with its cancellation telegrams, the manufacturers who owned a stake in the ham market didn't pause for reconversion, instead maintained full-speed production.

• **Here's Why**—The reasons for this include: (1) The war created a tremendous demand for the same standard line of high-frequency, amplitude-modulation equipment that this industry had for years been making for the amateurs who are interested solely in efficient long-range reception.

(2) There were 60,000 prewar licensed hams, but the war trained nearly



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2,000,000 new radio technicians. Makers of equipment for hams expect that recruits from this pool will boost the number of licensed amateur operators to 180,000 in three years, 250,000 in five, enough to take up much war-expanded plant capacity.

(3) Makers of ham sets have not suffered from the Federal Communications Commission's juggling of broadcast band allocations (BW—Jun.30'45, p90).

• **For the Fun of It**—Ham sets are designed primarily for the fun the operators get from tuning in on high-frequency broadcasts from amateur stations in Moscow, Tokyo, or Timbuctoo. Some of these have been equipped to receive standard low-frequency commercial broadcasts and F.M.

Leading manufacturers of amateur sets and parts include Hallicrafters Co., Hammarlund Mfg. Co., Inc., Meissner Mfg. Co., and The National Co., radio manufacturing engineers. An example of how the war affected the industry is seen in a plant expansion move by Hallicrafters this month.

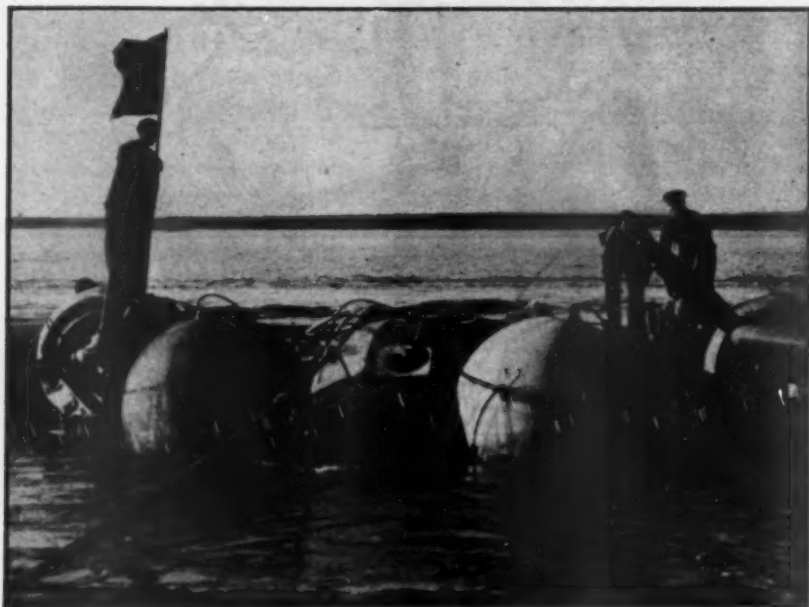
• **Eight Chicago Locations**—Hallicrafters—named for its president, William J. Halligan—claims to be the biggest maker of ham equipment. This company ex-

panded its factory from less than 80,000 sq. ft. in a loft building to eight Chicago locations totaling 400,000 sq. ft. Prewar gross sales of \$2 million a year passed \$37 million in each of the last two war years—all in critical war communications equipment. Most important Hallicrafter item was mobile field transmitting and receiving sets.

Now Hallicrafters is putting \$600,000 into a new plant of 141,000 sq. ft., anticipates selling \$16 million a year. The new plant will also house Hallicrafters' Echophone home-set division.

• **Prewar Favorites**—Two-thirds of the firm's high-frequency production is expected to remain in the standard 18 models that Hallicrafters has long made—receivers, transmitters, and radiotelephones. War-fostered improvements will be built in, but basically these sets are the tried-and-true favorites of pre-war years.

The other one-third of production is expected to be in newly developed types of radio and electronic equipment—facsimile transmission, television, bus and railroad radio, wire recording, and trick adaptations of electronics that include an "electronic secretary" which records telephone messages but never goes out for a smoke.



BALLOONS SALVAGE UNDERWATER HEAVYWEIGHTS

Navy salvage balloons that have raised 32-ton seaplanes from water 100 ft. deep promise peacetime application. To the sunken ship or plane, divers attach deflated balloon cells, which are then inflated by air compressors in a boat. A 40-lb. cell with a 58-in. diameter has a positive buoyancy of 6,000 lb.; a 75-lb. sphere 84 in. in diameter lifts 12,000 lb. By adding cells, heavy loads can be raised, towed ashore. Or—on a reverse play—engineers believe they can float a load—a foundation caisson, for example—to a desired spot, deflate the cells, and forthwith sink the object neatly into place.

Embattled Beer

Big brewers see spread of local prohibition as only threat to future prosperity, but small rivals have many problems.

After another record-breaking summer, the horizon of the big brewer surveyed through the bottom of a beer glass appears bright except for a single cloud no bigger than a prohibitionist's hand. This is enough to darken his spirit since a few years ago the cloud was no bigger than a prohibitionist's forefinger.

• **Dry Areas Grow**—For the determined ladies of the W.C.T.U. and their allies have abolished beer along with the hard stuff in their creeping advance through local option elections. The record shows that the brewers have made little progress in their solemn protestations that beer is a food and nonintoxicating in their attempts to disentangle their political fortunes from those of the whisky boys.

On their side, the distillers say that beer advertising coming into homes over the radio stimulates the ire of the drys. They also deplore the tendency of printed advertising to depict young girls gazing passionately at beakers of foaming lager. To counteract opposition the brewers are continuing their cooperative advertising campaign which spends nearly \$1 million annually to promote beer as part of the American way of life. State and local brewery organizations have intensified their drive to raise the tone of taverns.

• **Veterans Man Ramparts**—Peace has produced one staunch supporter on whom the industry counts heavily—the returned soldier and sailor. With hard liquor tabooed, beer was often the only liquid solace available to the fighting man between battles. Millions will come home with a liking for beer and they will not want it abolished. It is this military demand, along with high income at home, that has produced record consumption and lifted the proportion of packaged brews to 62% of the total. Before prohibition the figure was about 25%.

Last year we drank 80,000,000 bbl. of beer, thereby chalking up a new peak on the charts. The volume has risen steadily with the tide of war earnings, from 51,600,000 bbl. in 1940. This year's consumption is expected to equal 1944.

• **Supply Problem Eased**—Compared with many other industries, the brewers floated through the war tumults on a bed of hops and roses. They had no

"Clinch-lock" solves expansion joint problems for excessively high pressures ...

The newest member of the Cook line of "MagniLastic" expansion joints is the "clinch-lock" type, designed especially to meet requirements where excessively high pressures must be accommodated. An example of this type of expansion joint construction is illustrated at the right. This bellows is made of a high tensile Zirconium alloy steel. The copper brazed "clinch-lock" joint, also illustrated, increases the shearing strength at the joint over the shearing tensile strength of the actual metal itself. The metal has a tensile strength of 152,000 p.s.i., — but when "clinch-locked" and copper brazed in atmosphere controlled, electric furnaces, a tensile strength of 187,000 p.s.i. is developed. The complete bellows assembly is then stress relieved and heat treated.

Two designs of "clinch-lock" expansion joints are available, the globular and parallel shapes. The globular type is especially suited as an expansion and misalignment member and is designed so that the center diaphragms have a longer flexing span than the end diaphragms, enabling a greater hinging action at the center to produce angular displacement and distribute stress forces evenly through the entire bellows assembly, thereby eliminating concentration of these stresses at the ends. This construction, forming

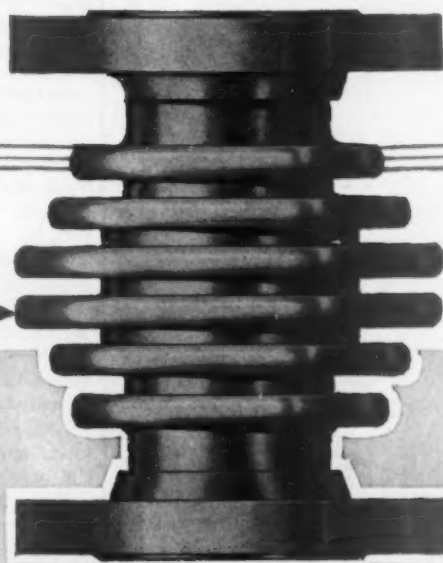


a spherical outline makes it unnecessary to use any additional spacing bars or rings and gives uniform proportional travel to each diaphragm in relation to stress forces created.

The parallel or standard type "clinch-lock" expansion joint construction, where expansion alone is accommodated, is constructed with flanges of identical diameters. Both types are manufactured for all pipe sizes, with pressure ranges from 300 lbs. p.s.i. upwards.

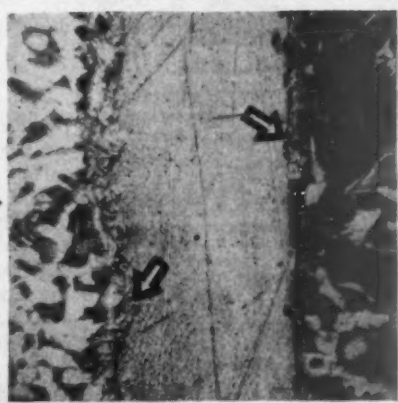
The "clinch-lock" type of expansion joint represents only one of a series of high pressure expansion members. Expansion joints of other materials, such as stainless steel, Monel, Inconel and all types of metals, are manufactured to meet specific problems relating to corrosion, elevated temperatures, and other factors encountered in the specific applications. Write for details.

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The globular type "MagniLastic" "clinch-lock" expansion joint.

Illustration of copper brazed "clinch-lock" which increases shearing strength of flange. Both inside and outside diaphragm edges are joined in this manner.



Photomicrograph of copper brazed "clinch-lock" at joint. Note penetration of copper into the metal itself.

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problem of conversion. At times supplies of raw materials and packaging necessities were short but they managed to squeeze through. With tin desperately tight, they were allowed enough to supply beer cans for the overseas military. Cans were (and are now) ruled out for the civilian market.

Brewers still must set aside 15% of output for the Army and Navy. This huge diversion has come in handy in arguments for purchases of supplies. Barley for malt (which is 70% of raw material expense) has been allowed in sufficient volume. While distillers were praying, usually in vain, for the release of corn, the brewers rolled happily along on allotments from a supposedly dry-minded War Food Administration. True the brewers use comparatively little corn. It amounted to only 12,900,000 bu. in record-breaking 1944. But the amount so diverted has risen steadily, more than doubling in the past six years.

• **Day of Reckoning**—Though the only visible threat to the big brewers is prohibition, their smaller rivals have plenty to worry about. During the war the sky was the limit on both production and sales, and the small-timers profited at the expense of their huge rivals.

Thus the 15% set-aside for the military was supposed to be allocated throughout the industry's plants. What actually happened was that many of the smaller companies could not meet the high requirements of Army or Navy inspections, hence the big shipping brewers were stuck with a disproportionate share of this business. Result was that the smaller plant was able to concentrate on his home market to a much greater extent than its larger competitor.

A day of reckoning approaches. The small boys have been piling on the production with little regard to upkeep of their equipment and without the necessity for doing much positive selling. Return of war veterans is expected to reverse the advantages. The big brewer, with a formidable fund for sales promotion, will regain lost territory. Moreover with the hobbles off truck transportation the big brewer can move into areas farther and farther from his home vats.

• **Too Much Capacity**—Right now the industry is overextended on capacity and when the shrinkage comes the slack will most likely be taken out of the hide of the smaller companies. The 80,000,000 bbl. now being sold annually come from plants with a probable potential of 90,000,000 bbl. In addition important companies are planning larger and more efficient plants. A reasonable estimate of postwar demand is 75,000,000 bbl. annually.

Small brewers are making so much



WAR TO PEACE SPIRAL

From submarines and bombers comes a handy spiral retractive cord for electric irons and other peacetime appliances. The "Coiled Kord" was developed by Kellogg Switchboard & Supply Co., Chicago, for war intercommunications systems. Now retail outlets will sell it as a replacement item; it will also be sold to manufacturers for use on new equipment.

money now that they spurn efforts of investment houses to buy for mergers or recapitalization. Old-timers say when competition for a shrinking market really gets hot, many small units will be forced to the wall or into mergers. This would be in agreement with the record since repeal.

Following the stampede of new organizations caused by the legalizing of beer, the number of companies has steadily declined. There were 712 breweries in 1934 and only some 460 now. During this shift to bigger plants, sales rose from 40,000,000 to 80,000,000 bbl.

• **Packaging Battle**—Brewers see little change in consumer preferences. A confirmation of packaged beer's popularity has been registered which will be even more pronounced with the veteran's return. Brewers would like to see the bottle industry and the can industry forget their rivalries but they realize it is too much to hope for. They are worried for fear the claims and accusations between the two camps will injure the fair name of beer with its customers.

From preliminary skirmishes it is evident that the can companies are preparing to invade the home market and that the bottle cohorts will do everything possible to hold the demand tossed into their laps when tin got short. American Can and Continental Can already are preparing the trade for return of the domestic beer can,

formula for full employment...

MORE AND BETTER
PRODUCTION AT
LOWER COST

LOWER
SELLING
PRICE

MORE
SALES

MORE
SALES

MORE EARNINGS
MORE JOBS

Finding a practical formula for "full employment" can't be done by juggling statistics on national income, production totals or trying for expedients to level out the peaks and valleys of "boom-to-bust" business cycles.

We think most business men and industrialists are agreed that if there is a formula at all it narrows down to the principle of "producing more and better for less" and creating jobs in the process as well.

Low-cost mass production methods in the manufacture of automobiles not only provided fine cars at low prices for more people but also created millions of jobs at high wages. It's the classic example of the principle of "producing more and better for less", but there are scores of other industries that bear out this simple truth.

Probably the formula for "full employment" isn't so formidable after all if all of us simply put that principle to work.

* * *

The facts of INDUSTRIAL PAR in themselves point to the answer to the problem of full employment. Check the record of your own company in these terms.



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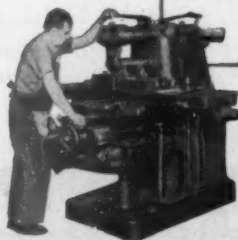
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EVERYONE who drives a motor vehicle over snow, ice or mud, needs a famous product made by American Chain and Cable ... a set of Weed Tire Chains.

If it snows in your locality before this advertisement appears, you might have difficulty finding a new pair of Weed Chains. Our factory hasn't been able to catch up since V-J Day released us from war orders. Consequently, we recommend having used chains repaired if they are still serviceable.

The war winters taught many lessons about the use of cars and trucks. One of the most emphatic lessons was that Weed Tire Chains offer the best insurance of traction when you need it most: to guard against stalling in the snow, skidding on ice, or sticking in the mud.

Weed Chains are only one of the primary products made by the 15 divisions of ACCO: Chain • Wire Rope • Aircraft Cable • Fence • Welding Wire • Cutting Machines • Castings • Wire • Springs • Lawn Mowers • Bolts & Nuts • Hardness Testers • Hoists & Cranes • Valves

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through advertising and other sales activities. The glass industry, meantime, is advertising the economy of reused bottles and ballyhooing the throw-away.

Brewers were pinched, as was the distilling industry, when the shortage of oak barrels became acute (BW-Oct. 20'45,p42). But the easing of war controls has again made aluminum barrels available.

Artificially Sired

More than 350,000 cows in U. S. now produce test tube calves in program that has outgrown experimental stage.

Artificial breeding of cattle, a technique which only a few years ago was still in the experimental state (BW-Nov.30'40,p36), has increased during the war years until now more than 350,000 dairy cows in the United States are producing test tube calves.

• **Pertinent Question**—Since the rapid development of this type of breeding has coincided with the wartime rise in farm incomes, a pertinent question now is whether artificial insemination would prove as popular if farm prices were to drop toward their prewar level. In ordinary times, the fee for such service (usually \$5 or \$6 per cow) might appear large to the farmer who, lacking his own bull, can employ his neighbor's herd sire gratis, or for \$1 or \$2 at most.

The semen from one highly productive bull can be diluted to service as many as 1,500 cows a year, although the average is in the neighborhood of 500. Thus 650 bulls were able to serve all the cows that were artificially impregnated in the United States in 1944.

• **Arguments**—Main arguments advanced in favor of artificial insemination are (1) that milk and butterfat production are increased through use of superior sires, and (2) that the farmer is thus freed from the trouble and, in the long run, expense of maintaining his own herd bull. It is set forth that an extra cow or two can be kept for what the bull would cost in investment, feed, and labor. Another point advanced is elimination of the danger of genital disease.

Objections raised by dairymen accustomed to having their own bull include: (1) that the cows have to be watched too closely to determine the heat period—19 hours at a maximum, and (2) that if more than one service is required (two is the average) the

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Actually, supplying large quantities of boilers to the United States Navy and Maritime Commission is only *one* of the ways B&W helped to speed wartime shipbuilding at the amazing rate of 3½ ships daily. It also supplied other boiler manufacturers with complete detailed working drawings and

billings of materials so that they—two other boiler manufacturers in respect to Navy boilers and ten other boiler manufacturers in respect to boilers for the Maritime Commission—might also build B&W boilers and in this manner make B&W boilers and boiler parts duplicate and interchangeable, no matter by whom they are built.

We at B&W are proud of this cooperation with the Services, and also of the fact that B&W boiler designs and constructions have been so well thought of by the Services that they were adopted as standards to be followed by other manufacturers. This is only *one* of B&W's many contributions to the winning of the war.



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There must be no compromise with *Safety*

Warner "Vari-Load" Electric Brakes are Safer!

IN the months ahead, motor transportation faces a mighty task. Straining to meet unprecedented peacetime demands, American industries are in urgent need of equipment, machinery and supplies. Loads that fail to get through on time will not only upset production and sales programs for these industries — but mean losses in revenue to trailer operators. Delays due to accidents caused by ineffective brakes *must be prevented* — there should be no compromise with safety.

Protect your drivers, your cargoes, and your trailer outfits — give them the **EXTRA SAFETY** of *Controlled Braking Power* — exclusive feature of Warner Vari-Load **ELECTRIC** Brakes. No matter what the weather, the driver can pre-set any and all brakes to fit **BOTH** load conditions and road conditions — thus keeping his train straightened out and under full control even when the going is slippery. Costly tie-ups due to damaged equipment are therefore avoided. On all future trailer purchases, specify Warner Vari-Load *Electric* Brakes—world-famous for safety, simplicity and dependable, trouble-free performance.

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Only a few flexible wires. Nothing to freeze, chatter or break off — No complicated mechanisms.



Bees Bred Artificially

Improvement of honeybees by artificial insemination has been reported by W. C. Roberts, University of Wisconsin specialist. According to Roberts, the technique holds great promise because ten or more generations of bees can be produced in the time required for one generation of cows—a fact that can accelerate the development of desirable characteristics.

The advantage of artificial insemination of bees lies in the fact that it is the only practicable method which makes it possible for the breeder to select the male. Under natural conditions, the queen mates in the air with whichever drone happens along.

system begins to become a nuisance and to cost money in terms of milk production.

It follows, of course, that the longer the cow is dry the greater the loss of milk production, which makes it a consequential matter if impregnation is delayed from one heat period to the next—three weeks.

• **In 23 States**—More than 42,000 farms in 23 states are now breeding cattle by the laboratory method. In this, of course, the dairy states lead. Wisconsin was first in 1944 with 97,344 cows so bred. New Jersey, where the first cooperative for such breeding was formed in 1938, was eighth last year with 15,024 artificially inseminated cows.

Breeding of this type is now mostly carried on by cooperatives and private businesses organized for that purpose. The farmer's membership in an association costs from \$1 to \$10, which is paid only once, and he generally is assessed \$1 per cow to raise funds for bull purchases. The hired inseminator usually gets \$3 of the \$5 or \$6 that is paid per cow for servicing. Additional services, if required, are at the rate of \$1 or \$2 a call.

Breeding organizations typically have 18 or more bulls. The dairy breeds customarily serviced are Holstein, Guernsey, Milking Shorthorn, and Brown Swiss, and many co-ops have at least four bulls of each breed. The bulls in such service are normally confined to the barn except for daily exercise on a merry-go-round—a revolving arrangement which walks them round a center pole.

• **Butterfat Increase**—Records kept by artificial breeding organizations in New York State give rise to the claim that,

Draw money-saving ideas from your employees...

last seven years, butterfat pro-
duct has been increased by 20% as a
result of their methods.

The short heat period of cows is the
reason why artificial insemination
has been extensively used with beef

Because beef herds are not con-
sidered as closely as dairy cows, the same
opportunities for observation and
artificial servicing do not exist.

County Fairs—One evidence that
artificial breeding is here to stay is
the recognition accorded it by many
county fairs, which have special classes
in competition open only to artificially
bred animals.

Russia has made great progress in
artificial insemination of animals since
Soviet figures for 1938 showed
10,000 sheep, 1,200,000 cattle, and
100 mares bred by that method.

SHOWDOWN OVER SHASTA

Congress has before it this week the
subject of a long-deferred showdown
on public versus private power in
California's Central Valley. The In-
terior Dept., developer of the power-
generation project, will have a deficiency
before the House seeking, among
other things, \$6,065,000 for valley trans-
mission lines for Shasta and Keswick
power.

Plans for these lines are sought now
from Pacific Gas & Electric Co.
to transmit Shasta energy to the
city of Roseville, Calif., which the In-
terior Dept. recently wooed away from
P. G. & E. as a wholesale customer (BW
12/4/45, p54).

Reaction on Interior's request should
be whether P. G. & E. shall buy
Shasta and Keswick output for re-
lease in the valley or whether Interior
shall get its own transmission system
and a large steam-electric plant in the
valley to firm up its hydro capacity at
two dams.

WAR TO STAY

Arizona farmers raising guar seed for
mucilage, used in papermaking (BW-
12/8/45, p42), are cheered by the news
that General Mills of Minneapolis will
renew contract for 1,500 acres in
1946, three times the 1945 acreage.

Guar mucilage replaced carob from
Mediterranean when that mucilage
was cut off by war, and it was thought,
in spring, that carob would displace
guar. General Mills now appears to
think that guar is here to stay.

Not so favorable for guar as a crop is
the fact that farmers are cutting down
their acreage planted for cover crop.
It has proved a rich green manure when
plowed under, but the seeds are hard,
and do not readily germinate.



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There's a wealth of time- and money-
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They're in the minds of your employees.
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Watts From Wind

Experiment with turbine

Vermont and recommendations by FPC engineer presage drawing of auxiliary power from

One of the world's oldest sources of power—the wind—may soon be harnessed by the nation's electric utilities for the first time.

Many practical difficulties have stood in the way of using wind power to augment water and steam-generated electricity supply. But last March, after nearly four years of intensive tests, a 1,000-kw. wind generator atop a 110-ft. tower at Grandpa's Knob near Rutland, Vt. (BW—May 10 '41, p. 22), was tied into the power system of the Central Vermont Public Service Corp. as a regular supplementary power source.

• **Unit Is Being Rebuilt**—Just three weeks later, due to a structural defect, one of the 74-ton blades of the huge wind turbine came off. But results, during both the test period and the three weeks of actual operation, were so satisfactory that the unit is being redesigned and rebuilt, and is expected to return to full operation some time next spring.

As an indication of widespread interest in the practicability of wind as a power source, S. Morgan Smith Co., the builders, George Jessop, the Smith Co. chief engineer and general supervisor at Grandpa's Knob, and Palmer C. Putnam, project engineer and chief consultant, have received more than 200 inquiries from all over the world since the project was first announced in the summer of 1941.

• **With OSRD**—During the war, Putnam, in addition to his work on wind power, was associated with the Office of Scientific Research & Development under Dr. Vannevar Bush, and was in charge of development work on some of the Army's amphibious vehicles.

Successful tests of the Grandpa's Knob project have galvanized two government departments into action on the subject of wind power. The U. S. Weather Bureau has just launched a survey on wind resources, based on a program of wind measurement recommended by Putnam.

The Federal Power Commission has just completed a full-dress study of wind power possibilities in the United States. A comprehensive report, which was written by FPC engineer Percy H. Thomas (BW—May 5 '45, p. 26), was the result of this study.

• **Two Wheels Recommended**—The wind turbine recommended in this re-

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it differs in several respects from the on Grandpa's Knob. The tower is 5 ft. high instead of 110 ft., and there two wheels mounted on a horizontal it instead of a single wheel. Thomas imated that no unit of less than 00-10,000-kw. capacity would be nomically feasible (the Vermont mill only 1,000-kw.). His recommended it generates 7,500 kw. at a site where erage available wind velocity is about m.p.h.

For sites with lower wind velocities (8 to 21 m.p.h.) Thomas has designed ightly smaller turbine with 6,500-kw. ed capacity. Putnam has estimated at generation cost will range from two ills to eight mills per kilowatt-hour, depending on the suitability of the loca- on, to which must be added cost of nmission to point of use.

Getting a Steady Flow—One of the ottest problems that had to be solved as to get a constant flow of current om wind of varying velocity. The randpa's Knob installation solves this echanically by allowing the blades to eather as wind velocity changes. Thom- t model solves it electrically by allow- g the wheels to drive a direct-current enerator with a speed range between ll value and 40%. This is tied into e alternating-current power line by a tary converter which runs in syn- ronism with the a.c. circuit.

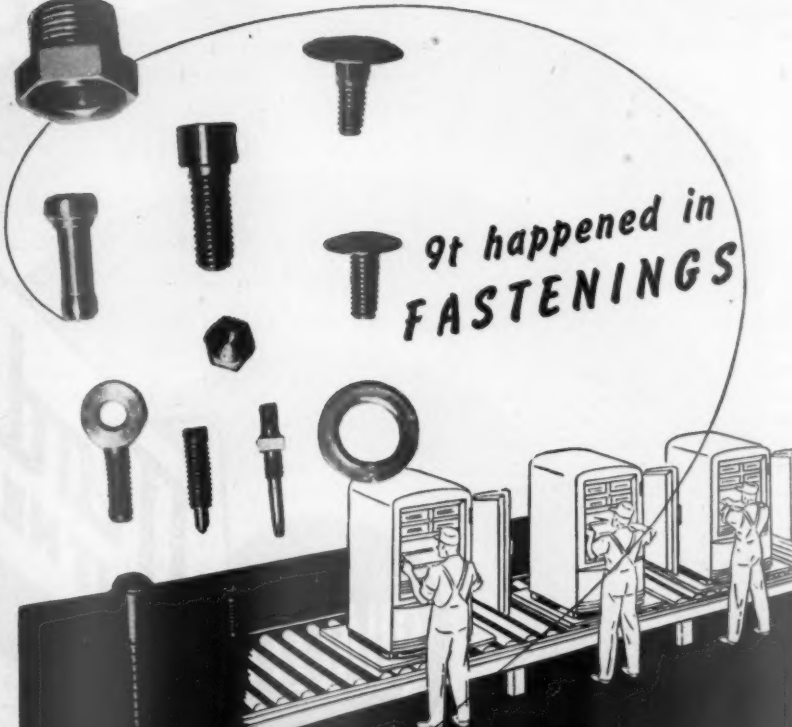
With the end of the war bringing out a relaxation of construction stric- ures, large-scale experimentation on oth types is expected.

Standby Source Required—It should e remembered, however, that even the indiest spot will sometimes experience eriods of dead calm. For this reason, ind power can never be relied on alone ithout some standby source—hydro or eam—for emergencies. The two types f power would supplement each other hen the wind turbine was operating, he water gates would be closed; when he wind was low, the water power ould be available.

Until wind power has advanced con- siderably beyond its present develop- ment, wind turbines will probably be irectly tied into existing steam or hydro- lectric power lines, as has been done in Vermont.

COOL TROLLEYS POPULAR

The "world's first air-conditioned trolley coach," under test in Atlanta, since last Aug. 19 (BW—Aug. 18'45, 73; Sep. 1'45, p26), has made such a hit with the riding public that the Georgia Power Co. has placed an order for 30 more with the manufacturer, Pullman Standard Car Mfg. Co. The company also reports inquiries from several other southern cities.



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PRODUCTION

Future Found for "Buffalo"

Twenty-ton amphibian can be adapted to many uses in industry, agriculture, and commerce, survey by builder indicates. Food Machinery Corp. will add nonmilitary versions to its line.

A military juggernaut is joining the list of wartime developments with important peacetime applications. Industries with unusual transportation problems are appraising the utility of the "water buffalo," amphibious tank created to storm enemy beaches.

Food Machinery Corp., builder of the twenty-ton amphibian, expects by the year's end to have enough data from prospective customers to guide it in producing peacetime models.

Bank Inquiries—The company's survey was prompted by an inquiry from a New York bank, which saw a place for a land-water tractor in hauling sugar and sugar cane over swampy terrain. The bank placed a tentative order for ten vehicles. Response to a questionnaire circulated by Food Machinery among industries with transportation hardships has been encouraging. More than 100 prospective foreign customers, half of them in South America, outlined uses and specifications for postwar Buffalos. Answers indicated that a vehicle that can swim or waddle over adverse terrain will be useful in ship loading and unloading operations where harbors are small; in various ranching operations; and in mosquito control, flood control, and sanitation.

Domestic Uses—Potential domestic users offered a score of suggestions. The buffalo can be used to plant "spat" in the growing of oysters; in oil fields in Louisiana swamps; for excavating materials in engineering construction; in placer mining; in unloading fish products where it is difficult to build a wharf; to clean out swamps in cranberry growing.

Company officials venture no guess as to how many orders will be on the books by the first of the year when the reconverted Buffalo makes its debut.

Two Models Planned—Engineers are correlating the data on required sizes, payload, and other specifications to aid in designing two peacetime commercial models to fit most needs. A small type, expected to have a gasoline engine, probably will have a \$10,000 price tag. The larger model, to sell from \$20,000 to \$25,000, may have diesel power. The first Buffalos produced for the U.S.

Navy cost \$37,000, but this price was pared to \$23,000 through mass production.

Maximum length of the commercial Buffalo is anticipated at 25 ft. 10 in.; height, 8 ft. 1 in.; width, 10 ft. 8 in. The unloaded weight will be 24,700 lb., with a cargo capacity of 12,000 lb. When fully loaded, the craft will have a speed of 22 mi. per hr. on land and 5½ mi. per hr. on water.

• **The War Product**—Heavily armored and powered with an engine using aviation gasoline, the wartime Buffalo, if sold as surplus war property, is considered uneconomical for commercial use. A few Alligators, predecessors of the Water Buffalo, were sold as surplus war material to a Seattle (Wash.) contractor.

The original Alligator, designed for rescue work in the hurricane-swept Florida everglades, was built in Food Machinery's Dunedin (Fla.) plant. Marine officers saw its potentialities as an offensive weapon, with guns and armor added.

Five different models of the Water Buffalo were produced in company plants at San Jose and Riverside, Calif.,

and at Dunedin. The last version, the LVT (4) with a stern ramp, will become the peacetime vehicle, which will be produced in Riverside.

• **Company's Record**—Building 11,000 of the wartime Buffalos skyrocketed Food Machinery's sales from a peacetime peak of \$13,472,194 in 1941 to \$179,951,355 in 1944, when 85% of its sales came from the amphibious tanks. Three or four other companies built Buffalos, but Food Machinery, which did the engineering and acted as central purchasing agent, built 80% of them and 65% of all amphibious tanks.

The postwar Buffalo will be added to the 1,100 items produced by Food Machinery's ten manufacturing divisions whose 14 major factories are in California, Michigan, Ohio, Illinois, New York, Florida, and Texas. After a humble beginning at the Bean Spray Pump Co. in 1884, with \$25,000 capital, the company was rechristened the Food Machinery Corp. in July, 1929.

• **Wide Field**—Mergers broadened the company's activities to make it the world's largest manufacturer of machinery for handling of fruits, vegetables, evaporated milk, fish, and meat products from the time they come from orchard, field, farm, or sea until they are packed for the consumer.

LIGHTING JUBILEE

Forty G-E germicidal lamps to be installed in New York's 17th Regiment Armory for the forthcoming Victory Lighting Jubilee, which opens for a five-day run on Nov. 26, promise to make the affair the first exposition with an anti-cold-catching feature.

Cosponsored by leading manufactur-



Working in California's dry Santa Ana River bed, the amphibian Water Buffalo demonstrates another potential peacetime use—clearing away brush, cutting new channels for high waters in the interest of flood control.

NEW PHOTO PAPER ELIMINATES DARKROOM

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ers of electric lamps and lighting fixtures, the jubilee is expected to reveal new developments in lighting to the distributing and consuming public. The germicidal lamps, used for some time in hospitals, military barracks, schools, and industrial plants, are designed to furnish ultraviolet radiation for killing enough air-borne bacteria and viruses in the auditorium to give measurable protection to jubilee employees and visitors.

Mold Conquered

A. & P. develops electronic oven to kill spores after loaf is wrapped. Huge savings and sales-appeal are envisioned.

Yeast in bread is one of those things man learned how to start but not to stop. As old as bread itself is the problem of mold whose fungus spores are activated and fed by yeast that continues to work after the loaf is baked.

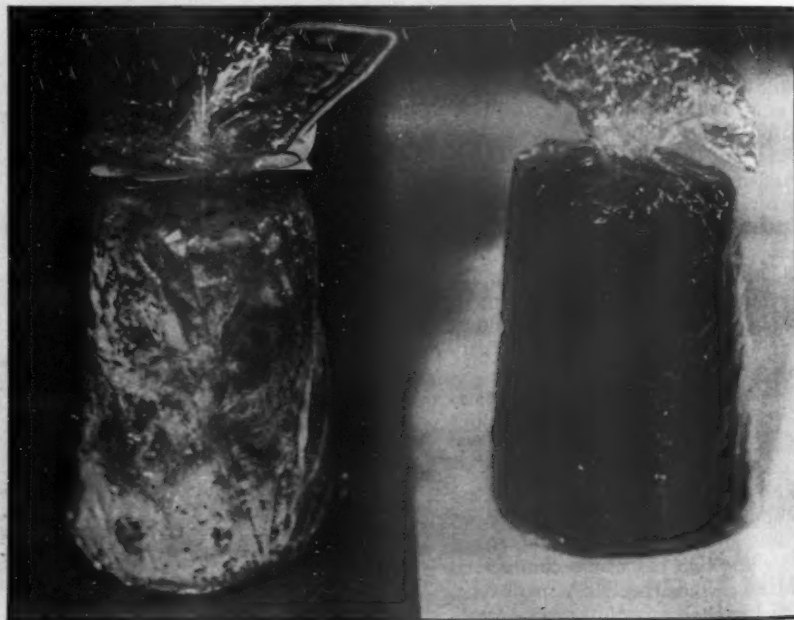
• **Rays Kill Spores**—Nearly 100 years ago bakers began adding vinegar to their dough; this helped some, but customers disliked the resultant flavor. Two years ago bakers adopted chemical retardants (sodium or calcium propionates) which increase mold resistance 200% to 400%, but do not prevent mold.

Now the Great Atlantic & Pacific Tea Co. announces that beginning Jan. 1 its

37 bakeries will be equipped with electronic ovens in which wrapped bread will be subjected to five seconds' exposure to electronic rays. This, according to William B. Cathcart, 34-year-old head of the A. & P. bakery laboratories, who perfected the process, will kill mold spores without causing any change in the bread's flavor or nutritive value.

• **Three-Week Test**—Tests on two loaves from the same batch of brown bread, which is especially susceptible to mold because of its high moisture content, show the electronically treated loaf still free from mold after three weeks in moist, warm air, while the untreated loaf, which, incidentally, contained a chemical retardant, was covered with mold that started forming after only three days. The process will not, of course, prevent mold caused by wild spores settling on bread after it is unwrapped in the home.

• **Sales Appeal**—A. & P. conservatively estimates that the process, if universally adopted by commercial bakeries, would save at least 150,000,000 lb. of bread annually. Most of this saving would accrue by preventing the mold that sometimes starts in delivery trucks and in retail stores; spoilage in consumers' homes is impossible to estimate. Since A. & P.'s annual production is 600,000,000 lb. (1944), the company's annual saving should be significant despite the still-undetermined—but probably high—cost of installing electronic ovens. But much more significant is the sales appeal to housewives.



And now bread mold succumbs to electronics, A. & P. tests indicate that after three weeks in warm, moist air an untreated loaf (left) was covered with feathery spores, while an electronically treated loaf (right) was still mold-free.

She's "romancing" with Katharine Brush's new hero...



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Every issue of *Cosmopolitan* is replete with really great writing. And

great writing makes great reading. It soothes the spirit. It feeds the mind. It makes a girl ambitious for the privileges and pleasures she reads about.

And you, National Biscuit Company, you can capitalize on this mood created by Katharine Brush's writing. Here's where your ads can point out to her that Ritz Crackers add a touch of luxury to soups, snacks, or suppers.

Show her that Nabisco Shredded Wheat may be served in a dozen different delicious ways!

So reach for her now, Nabisco! She's been swayed by the stories of Faith Baldwin, Louis Bromfield, and all the other great authors in *Cosmopolitan*.

Emotion's a mighty motivating force, National Biscuit Company. It makes wars — and marriages — and SALES!

Cosmopolitan

GREAT WRITING MAKES GREAT READING

Emotion makes Wars ✓
Emotion makes Marriages ✓
Emotion makes Sales ✓

HOW A DISSTONEER CUT COSTS ON A HOG MACHINE OPERATION



A producer of wood chips used in making pulp board and tanning extracts was having trouble with the knives... Because of the highly abrasive character of the wood used, his carbon steel knives required sharpening every two hours, an operation which took 45 minutes each time.

The Disstoneer* called in to help solve the problem recommended the use of Disston Super-Safe Hog Knives. Resharpening was reduced from once every two hours to once every ten hours. There was also a marked reduction of undesirable wood dust or fines; wear on stones was reduced, thus fewer stones were needed; production was considerably increased and, at a lower cost per cord of wood chipped.

Another clear-cut case of Disston leadership



You may have no need for Knives of this character, but nearly every industry can speed up work and cut costs with **DISSTON HACK SAW BLADES FOR MACHINE USE**

There are Disston machine hack saw blades for every Hack Saw Machine. Supplied in two types of steel: Disston High Speed Steel Blades for cutting stainless steel, chrome-nickel steels and similar alloys and Disston Di-Mol Blades (molybdenum and tungsten alloy) for cutting tool steels, machine steels, cast iron, tubing and for general machine shop production. Write for further particulars.

Interior view of hog machine showing Disston Super-Safe Knives bolted in position.

HENRY DISSTON & SONS, INC., 1128 Locust, Philadelphia 35, Pa., U. S. A.

Cheap Nitrates

Pilot plants to test new process for obtaining nitric oxide from air, developed at University of Wisconsin.

Pilot-plant tests of a new method of nitrogen fixation will shortly determine whether that scheme will work on a commercial scale and whether it has economic opportunity in competition with present methods. The process, a wartime research development at the University of Wisconsin, converts nitrogen in the air directly into nitric acid with a comparatively small and low-cost installation.

• **Nitric Oxide From Air**—The Wisconsin process was developed under Dr. Farrington Daniels, professor of chemistry, from ideas conceived in 1939 by Dr. Frederick G. Cottrell, distinguished California chemist. The novelty is a direct combination of air nitrogen with oxygen in a furnace about as big around as a silo and one-third as tall. At 4,200 F. with rapid chilling to 580 F. one gets experimentally a profitable yield of nitrogen oxides. The new pilot plant is to try out engineering feasibility on a large scale, permitting accurate dollar estimates.

The investigation is supported jointly by the university, the Wisconsin Alumni Research Foundation, and a Tientsin salt company, Yungli Chemical Industries, Ltd. American representative of Yungli is G. P. Hou, Universal Trading Co., New York City. Pending patents will belong to Wisconsin Alumni Research Foundation, holder of the Steenbock synthetic vitamin D patents. A low royalty is promised by the foundation to encourage development in various parts of the world.

• **Plants in China**—Pilot-plant operations start in January, with the hope that commercial plans will be feasible by summer. First plants are likely to be built in China, as the new method seems well adapted to small scale installations. Licenses for several American installations also are in negotiation, foundation officials say. American installations will have to compete with a tremendous surplus capacity of government war-built ammonia plants.

For American installations the Wisconsin process has the handicap that it does not first make ammonia, which at present is the most wanted form of fixed nitrogen. Hence even technical success would not permit the new process to supersede ammonia plants except where nitric acid is the chemical wanted, usually less than a quarter of

the total of desired products at such establishments.

Income for Research—Income from patent licenses, domestic or foreign, will further finance research in the University of Wisconsin. The foundation officials would, of course, welcome such a new money source, as major income was lost when the Steenbock patents were held invalid (BW—Jun. 16 '45, p. 51). Original Steenbock patents would have expired this year anyway.

WAR LESSON APPLIED

The Norris Stamping & Mfg. Co. of Los Angeles, applying a few tricks learned in war production, promises housewives something novel in kitchen pots and pans—Thermic-Ray Cookware, which will have complete lines of stainless steel and drawn aluminum utensils.

In producing cartridge cases and containers, Norris fashioned an aluminum container with a heavy bottom and thin side walls drawn from one piece of metal.

This same principle will be used in reconverted war plants to make aluminum cookware. Drawn from a continuous piece of seamless aluminum, the utensil will have $\frac{1}{2}$ -in. thick bottoms tapered into $\frac{3}{4}$ -in. side walls. The heavy bottom gives better distribution of heat; the lighter side wall makes the pan easier to handle. The stainless steel line will feature the "Atomic-Bond" copper bottoms to give the advantage of quick, even heat distribution.

Another Norris postwar product will be refrigerated cabinets to be produced for other companies.

EDUCATION IN PLASTICS

The plastics industry has discovered that the public's acceptance of it as a miraculous source of good things is not without its drawbacks. Most consumers do not understand the differences between the various types of plastics used in articles they buy, and hence are unable to make the best use of them or take the best care of them. Retail store clerks, and even buyers, are generally no better informed.

Widely welcomed, therefore, is an eight-page booklet, "Informative Labeling Guide," published by the Society of the Plastics Industry, Inc., 295 Madison Avenue, New York, which represents 86% of the firms engaged in manufacturing, molding, fabricating, and laminating plastics. The booklet contains basic descriptions of plastics commonly used in consumer goods, and offers suggestions to manufacturers for suitable labels for plastic products, specifying the material's heat resistance, fragility, color fastness, etc.



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"Sunship," like many other leaders in American business and industry, selected Sunroc Water Coolers because of their well-known superiority in design, construction, and economical, trouble-free operation.

Sunroc Water Coolers are the safe, highly specialized product of one of the pioneers in the water cooler industry. Experience in meeting rigorous Government specifications in war-time has further perfected the Sunroc models now offered for sale. For the complete Sunroc story, write Dep't BW-12, Sunroc Refrigeration Company, Glen Riddle, Pa.

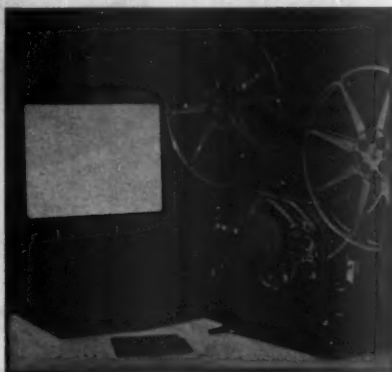


SUNROC
Water Coolers
GLEN RIDDLE, PA.

NEW PRODUCTS

Diminutive Projector

Deliveries of the new Model 63-L Movie-Mite 16-mm. Sound-on-Film Projector can be expected any time from its manufacturer, the Movie-Mite Corp., Kansas City 6, Mo. Claimed to be the



lightest weight, most compact 16-mm. outfit to come to market, it weighs only 27½ lb. complete with everything necessary to put on a showing in a small business conference or in a home. One 8x12x15-in. plywood case houses everything: projector, speaker, screen, 800-ft. take-up reel, electric cord, reel arms for 2,000-ft. reels of film (but not the large reels themselves which do not fit into such a small case).

Three minutes is said to be ample time for unpacking, setting up projector and speaker, threading the film, and beginning a showing. A single standard projection lamp is used for both picture and sound, no separate exciter lamp being necessary. There is an in-built centrifugal blower to assure cool operation and long lamp life.

Fluid Coupling

The Brad Foote Speed-Flo Drive for industrial equipment, such as machine tools, buses, truck tractors, maritime hoists, and utility drives, is a fluid coupling that is simultaneously a hydraulic clutch and a speed control unit. A recent product of the Brad Foote Gear Works, Cicero, Ill., which is licensed under the Thomas patents, it is not standard shelf merchandise, but is to be engineered by its manufacturer to specific jobs. Units in a range from 2 hp. to 250 hp. are being or have been built; smaller and larger sizes are being contemplated.

In shape each unit is a compact, flattened cylinder to be mounted like almost any other clutch or coupling between a prime mover and a driven

mechanism. Rotation of the prime mover revolves the clutch housing which incloses four planetary gears equally spaced around a central shaft that is mounted on the output shaft. Each planetary gear in combination with the sun gear forms a hydraulic pump. Within the oil-containing reservoir formed by the housing is a valve controllable by a rod.

Opening the valve a little, to permit a flow of oil, causes the sun-gear shaft to revolve slowly; opening it a lot is said to permit most of the prime mover's speed to be transmitted. These speeds are said to be infinitely variable from zero up to 95%, without the generation of excessive or troublesome heat. The unit is reported to cushion sudden heavy loads which might otherwise cause serious damage to driver or driven. Package units, to be made up of a motor, a hydraulic drive, and a gear-type speed reducer, will be made available in the future.

Combustion Unit

Newest development to come from the laboratories of the Shell Oil Co., 50 W. 50 St., New York 19, is an unusual Combustion Head for Domestic

THINGS TO COME

Expansion joints in the broad concrete highways of the mobile future will neither ooze in summer, craze in winter, nor cause annoying jars, with accompanying car rattles, to passing motorists at any season. A new joint filling composed of a heavy, compressed, chemically treated wood strip running the full width of a concrete slab is said to be free from warpage, to provide a waterproof union with the cement, and to wear indefinitely.

• Cosleepers in the well-equipped, double bed of some months hence will no longer have cause to wrangle over the depth of covers. Though one occupant may wish more or less warmth than the other, both will have their ways. By virtue of a forthcoming double control—to be marketed at a few dollars more than a customary single control—each will adjust his side of their common electric blanket to the precise degree of heat fancied or required.

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"Ditto gets out our up-to-the-minute bulletins for salesmen in less than five minutes. We save \$40.00 a month over previous copying method and get our copies faster."

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Kansas City, Mo.

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"Besides securing more complete records and eliminating copying errors in payrolls, we are saving 57% of the time formerly required."

Albert Vinal, Treasurer
Stetson Shoe Co.

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WITH

EXPLOSION-PROOF MULTI-POINT

SAMPLING VALVE

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Continuously measuring combustible gas and vapor hazards in air at a number of selected points within the plant, this compact panel installation employs the M.S.A. Explosion-proof Combustible Gas Alarm with explosion-proof Multi-point Sampling Valve. Air may be sampled at 4, 6 or 8 different localities, with the sampling point under test at any period automatically shown by visible number on annunciator lights. The amount of combustibles present in the sampled atmospheres is shown on a remote continuous graphic recorder; the Alarm actuates a warning signal when gas concentrations at any point exceed the predetermined limit. Write for descriptive details!

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Oil Burners of the gun type, which promises to cut fuel consumption by as much as 20%. Briefly described, it is a system of adjustable, spiral baffles that mix air with atomized fuel in a manner claimed to be more thorough than previous fixed baffles. The head, which is being made available to oil burner manufacturers under a licensing arrangement, may very probably be brought out in a form that will convert oil burners now in operation.

Two-Faced Heater

A grid-like, resistance heating element fused right into a plate of textured glass, that is said to be unbreakable, forms the business part of the Infrared Room Heater, new product of the Radiant Heater Corp., 521 Fifth Ave., New York 17. Mounted in a portable frame for office or home (or in a common wall between two rooms) and connected electrically, the heater is reported to transmit a higher percentage of its heat by the radiation of infrared rays than previous electric heaters. Unlike most of the latter it radiates heat from both sides of the plate, yet does not get hot enough itself to scorch paper or cloth if either one should come into accidental contact.

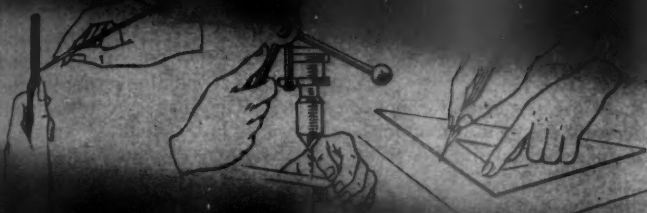
Changeable Display

Quickly changeable, plastic letters on the lower portion of the Nu-AD Illuminated Display Sign make possible



daily, or even hourly, changes in selling copy. The new product of Baldwin & Shackleton, Inc., Sweetland Bldg., Cleveland, has a single, tubular fluorescent lamp concealed in its interior which illuminates both the edge-lighted, etched glass, permanent sign at the top and the three lines of changeable letters at the bottom. Being made of a clear plastic that transmits light around curves, the letters have an ingenious bend at their tops that renders attachment or detachment simple.

UNERRING hands



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Precision engineering and manufacture call for unerring hands. But hands, unfortunately, can do well only what the eyes see clearly.

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STAYS PUT WITHOUT LOCKING

CHOICE OF 4 BASES



Plungers Ride Cheap Utilities

Wall Street believes boom in that group's better shares is justified, but it looks apprehensively on traffic in cats and dogs. Volume and nature of Curb trading reflect speculative spree.

No recent visitor in New York's financial district could retain any lingering doubts about the fantastic growth of inflation sentiment since President Truman's announcement of his wage-price policy (BW—Nov. 10'45, p118).

Any misapprehensions one might have on that score, would be quickly dispelled by a peek at the New York Curb Exchange.

• **What's There**—The Curb is traditionally the temporary home of many stocks acquiring the seasoning they need before graduating to the Big Board. Likewise, many long-outstanding stocks with proved earning power and excellent dividend records are listed there.

In addition, however, the Curb normally houses one of the greatest agglomerations of low-price securities

ever amassed to whet the appetite of the plunger. With inflation in the air, the Curb thus becomes the mecca for seekers of stocks that offer "percentage-profit" possibilities.

Of late, the Curb's speculative pot has been generating steam in a manner not witnessed since the "good old days" of 1929.

• **Volume-Wise**—Normally, the transactions of a Curb trading session total far less than those of its more important neighbor. Until recently, in fact, Curb volume had exceeded that of the Big Board only once in all the years of the Curb's existence as an out-of-door market and in the almost quarter-century it has spent under a roof. And that single exception had occurred during the two-hour Saturday session.

Lately, however, for the Curb to beat

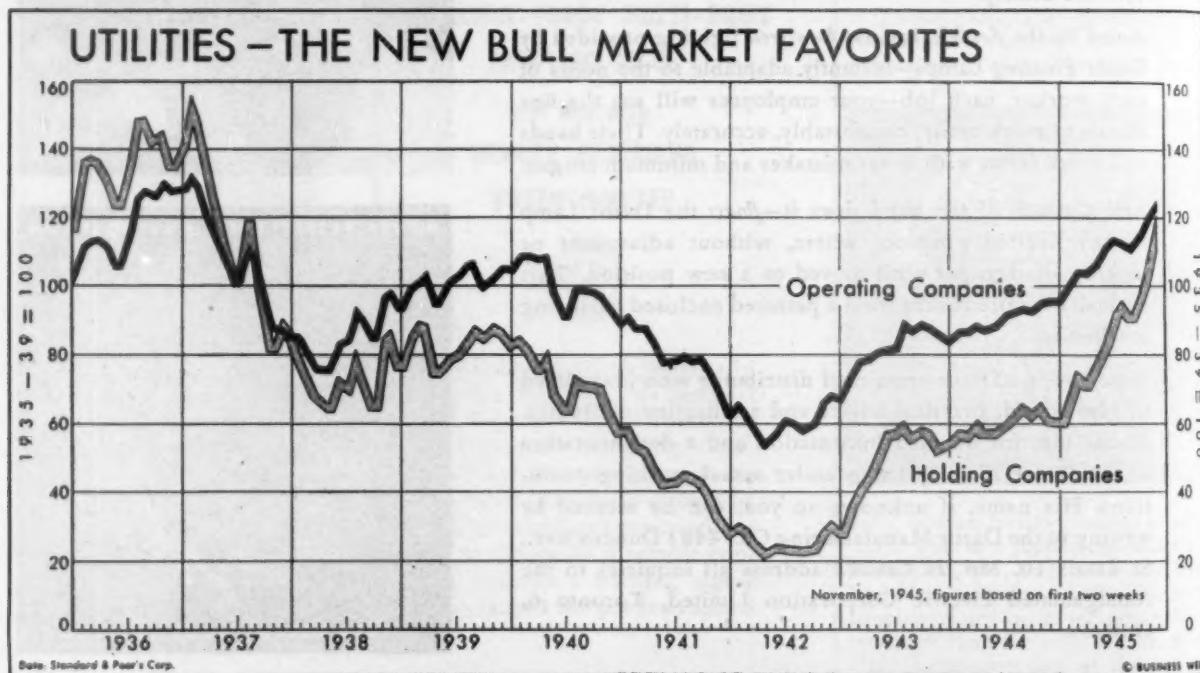
Big Board trading totals has become commonplace. This is due to the rise of the inflation-conscious, including many amateurs, to hedge against the future by obtaining some of the Curb "under-\$5" cats and dogs.

• **Record-Breaker**—Only two Saturdays ago, for example, Curb trading volume ran well ahead of the New York Stock Exchange. This has been followed by a real record-breaker. Last week, for the first time, Curb transactions exceeded a full five-hour Big Board trading total.

Much of this excitement on the Curb has been caused by the return of the utility shares as the market favorites. And particularly potent has been the sudden yen of the plunger for the cheapest stocks in that category, many of which are Curb-traded.

• **A Reappraisal**—The legitimacy of much of the swing towards the stocks of both the utility operating and holding companies in recent months (chart) cannot be denied. Wall Street long ago began to believe that many had been considerably oversold and it wasn't long before a substantial amount of so-called "smart money" was going into well selected lists of utility issues.

The trend upward became evident early last year. It was then that more and more investors appeared to wake up to the fact that the industry faced the



Standard & Poor's utility stock price indexes, like the industrial and rail averages, have finally moved back to levels not far under their 1937 peaks. They have been helped no end, in this respect, by this year's 30% rise in the operating company average and the 95% gain of

the more volatile holding company issues. Both, however, are still far from their extravagant 1929 peaks. In that year the operating company index, now 124.9, touched 396.3. The holding company average hit 834.4 in 1929, almost seven times its current post-1937 high of 120.3.

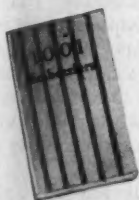


PICTURE OF A MAN "ROOKED" OF \$8,000!

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Cleveland's Balanced Production Pays Off Again

ONLY three counties in the United States experienced greater industrial expansion during the war than Cuyahoga County—Greater Cleveland. Yet, Cleveland has been designated as an "in balance" city by the War Manpower Commission.

From top ranking war goods volume to high-level civilian goods production was but a step for "the parts center of the nation." The automotive industry, the electrical industry and the home appliance industry are turning naturally to Cleveland for prompt delivery of needed parts and assemblies.

Cleveland offers many advantages to manufacturers who seek to relocate their plants. Abundant raw materials are near at hand, low cost power is available, transportation facilities are excellent—and 71% of the nation's buying public is less than 500 miles away.

This bank will gladly furnish helpful information and assistance to any company interested in a Cleveland location.

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reconversion problems. Also, it was realized that most of the industrial load the utilities would lose when peace returned had been yielding relatively small revenues.

• **Favorable Signs**—Many investors have since become impressed by the improvement of finances accomplished over the past decade and by the way the industry has availed itself of easy-money conditions to cut fixed charges sharply. The gradual improvement in the utilities public relations has been another strengthening factor, as has been the noticeable easing of the agitation for public ownership of local utilities.

Those buying utility stocks as an investment, and not for a "quick turn," haven't overlooked the fact that post-war costs will be higher than they were before the war or that the long-term trend of rates will continue downward.

However, they expect the latter to be a less important factor than in the past, since many higher-than-warranted rates have vanished already and there has been a widespread move towards reducing former inflated book values of property to an original cost basis.

• **Efficiency Factor**—The higher costs, they similarly hope, can be overcome to a great extent by the installation of more efficient generating equipment.

The prospective relief from wartime taxation, especially the excess-profits tax, however, has probably been the main reason for this year's sharp acceleration in the rise of the utility stock price averages. In more than a few cases, 1944 excess-profits-tax provisions amounted to more than final earnings per share reported by companies on their common stock.

• **Problematical**—Undoubtedly there will be much actual disappointment on this score in the years ahead. How much of the tax savings can be retained is problematical. One can at least rest assured that few regulating bodies will overlook such savings when eyeing a company's rates.

Not all the utility buying lately, unfortunately, can be classed as "legitimate" investment. As always happens, the improvement in sentiment has risen far beyond reasonable levels in many quarters. Much more active than the better-quality issues for some time have been lower-priced shares which very definitely don't enjoy the favorable outlook that others can claim.

• **Cause and Effect**—The gains, percentage-wise, recorded lately by many utility common stocks selling within the \$5-\$10 range, and among those costing from \$5 down to less-than-\$1, have been fantastic. The crap-shooting tactics responsible for such showings have been causing much of the large

Sitting pretty . . .



and 7 pounds lighter

Made of Mazlo Magnesium, this new lightweight seat, designed by Douglas Air-

craft Company engineers, reduces the weight per 21-passenger plane by 147 pounds. Yet it costs but slightly more than half the price of the old type chairs. This savings in weight alone, can mean an added passenger, or the revenue on 147 pounds of cargo.

Here's something to think about when designing tomorrow's passenger, cargo and personal planes. Magnesium alloys give the required strength and dependability, along with maximum savings in weight.

American Magnesium engineers will gladly sit down with you and help you employ magnesium to best advantage. Write Aluminum Company of America, Sales Agent for American Magnesium Products, 1711 Gulf Building, Pittsburgh 19, Penna.



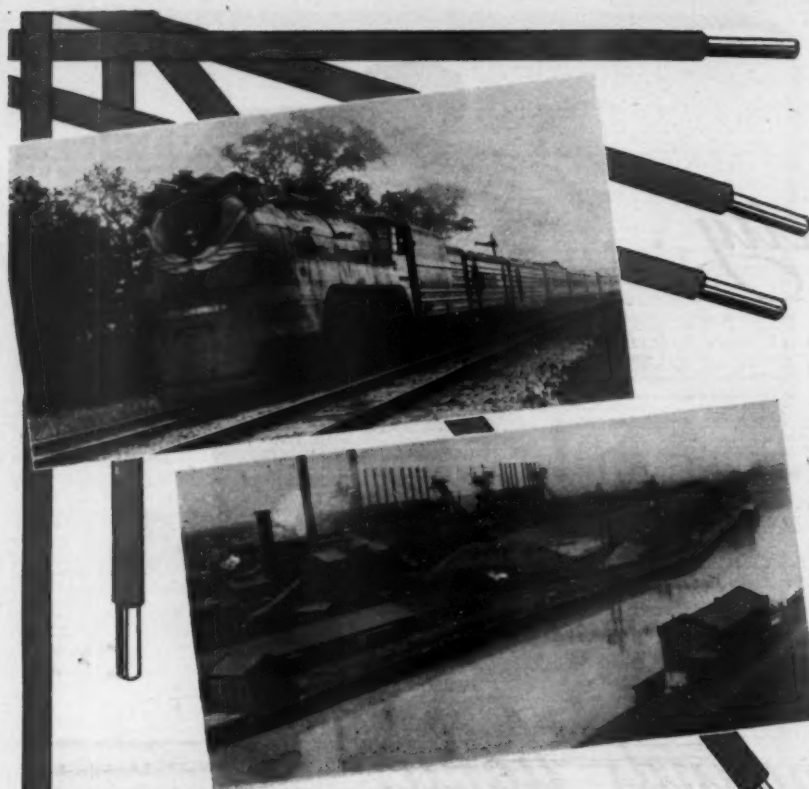
MAGNESIUM



PRODUCTS

**AMERICAN MAGNESIUM
CORPORATION**

SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA



When heavy industry demanded a
superior phosphor bronze electrode . . .

Phos-Trode

met the need — providing the first desirable
combination of shielded-arc characteristics

For many years there has been a definite need for a phosphor bronze arc welding electrode with true shielded arc manipulative and deposit characteristics.

Phos-Trode gives you these advantages. It is a heavy coated, shielded arc electrode that operates on reverse (positive) polarity, direct current. The **Phos-Trode** arc is soft, resulting in transfer of the metal by a spray action. It can be used in all positions. Spatter loss is reduced — deposition efficiency is increased — deposit physical properties and density are im-

proved—and the beads are exceptionally smooth, feather edging perfectly into the base plate on overlays, fillets, and groove welds.

Phos-Trode is recommended for the high-speed quality welding of bronzes, brasses, copper, steel, cast and malleable iron in all positions. It may also be used successfully to weld dissimilar metals such as copper to steel, bronze to cast iron, etc.

Sizes available: $\frac{1}{8}$ ", $\frac{3}{32}$ " $\frac{7}{16}$ ", and $\frac{1}{4}$ " diameters. Write for your copy of the new **Phos-Trode** bulletin.

W-60



Ampco Metal, Inc.

Department BW-11

Milwaukee 4, Wis.

Field offices in Principal Cities

trading volume on both the Curb and the Big Board.

One day last week, for example, almost 30% of Big Board activity came from the trading in ten stocks, mostly utility holding company issues, with an average cost of only \$7.42 a share.

• **Case in Point**—In the previous week, when Big Board volume totaled 8,941,000 shares, almost 519,000 shares represented the trading in Commonwealth & Southern common stock alone. The buying of these shares, moreover, was so frantic that the stock closed at a price of \$3.50, or 150% higher than its final level the week before.

When trading resumed last week, buying orders that had accumulated over the week end were so heavy that within a few hours the stock jumped to \$4.25 a share.

Why? Wild-eyed speculative purchases appear the only reason. Some months ago the same shares, which have paid no dividend for years and which one authority recently estimated had an asset value of less than \$1 under an SEC-approved recapitalization plan, could have actually been purchased for \$0.6875 each.

• **Even More So**—An even more alarming picture is available of what happens



HEAD OF THE LINE

Western Union Telegraph's new president, Joseph L. Egan (above), assumes his office with more than 30 years of service in the company to his credit. Starting in 1912 as attorney, Egan was elected vice-president in charge of public relations in 1938, was active in negotiations leading to the purchase of Postal Telegraph Co. in 1943. He succeeds A. N. Williams, now chairman of the board.



HARNESS A BLIZZARD TO HEAT YOUR HOME?

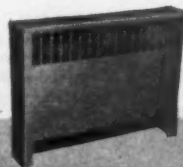
Yes, you *could* . . . with standard Trane equipment. You see, there's heat even at 20 below . . . and Trane engineers know how to extract it. Your home can be made warm and comfortable with as little as 5° of heat taken from the cold air.

Heating homes with blizzards is not the purpose of Trane equipment — this merely serves to illustrate why Trane can do your everyday heating job so easily and economically. Little wonder that the streamlined Trane Convactor-radiator — successor to the cast iron radiator — has proved so practical.

Heat Transfer is Trane's business, along with heating, cooling and air handling. The Trane Convactor-radiator is just one of many practical examples.

Trane for instance developed a special heat transfer device that enables planes to fly seven miles high . . . another keeps deadly ice off the wings of fighting planes.

Solving such problems, performing miracles is every day work for Trane. So keep your eye on Trane for better heating, cooling and air handling, for comfort or industrial processing.



THE TRANE COMPANY

FIRST IN ENGINEERED CLIMATE

MANUFACTURING ENGINEERS OF HEATING, COOLING,
AIR CONDITIONING AND AIR HANDLING EQUIPMENT

LA CROSSE, WISCONSIN

PICTURE OF

YOUR EMPLOYEES'

HomeTown



This view is typical of the charm and beauty of the average New Hampshire manufacturing community



LOCATE your small manufacturing plant in New Hampshire and this is the sort of town in which your employees will live. There will be fine stores, excellent schools and churches consistently well attended.

There will be trim dwellings with well-tended gardens. From such

American homes as these, the people who are with you during working hours can reach good hunting and good fishing during leisure hours. Because these people live exceptionally well, they also enjoy their work.

Other manufacturing advantages in New Hampshire include: Low power rates, fine transportation to markets everywhere and a system of road patrol which makes highways usable every day in the year.

Write for your copy of our booklet on locating small and medium-sized industries: "A Plant in New Hampshire." Address Edward Ellingwood, Industrial Director, 10 State Office Building.



NEW HAMPSHIRE

State Planning and Development Commission
CONCORD, New Hampshire

when there is too much trading in cheap utilities by people who know nothing of the risks being assumed.

On the Curb one day early last week, more than 1,000,000 of its 2,350,000-share grand total came from the trading in five utility stocks costing buyers \$3 or less.

The most active were Commonwealth & Southern "optional warrants." Over 540,000 of these changed hands that day alone and they closed at a price of \$0.4375 each, compared with the \$0.0625 they had been commanding but a week before.

• **An Option to Buy**—What is the security behind them? Nothing. They represent simply an option to buy Commonwealth & Southern common stock at a "special" price of \$30, the very same shares, in fact, that at the same time were being traded in gobs on the Big Board at a price of around \$4 each. That is why a few years back 256 of them could have been purchased for \$1.

Wall Street isn't worried about the present boom in the better grade utility stocks. It thinks that is justified. However, it doesn't like what has been going on in the utility cats and dogs. It knows that, in the end, there will be some badly burned fingers.

UTILITY DEAL STALLED

Acquisition by the city of Louisville of the Louisville Gas & Electric Co., proposed over a year ago (BW—Jul. 8'44, p57), receded still further into the future following this month's municipal election.

In 1944, Wilson W. Wyatt, Louisville's Democratic mayor, and Arthur E. Hopkins, president of the Republican-controlled Board of Aldermen, were united in support of the purchase plan, which progressed to the point of actual discussion of prices (rumored to be in the neighborhood of \$85 million) with L. G. & E.'s parent, Standard Gas & Electric Co. However, soon afterwards Hopkins died, and the other Republicans on the board reversed their field, effectively blocking further consideration of the project.

Hope of the public ownership proponents that the Democrats would get control of the Board of Aldermen in this month's election was vain, and the Democratic candidate for mayor, E. Leland Taylor, won by only 221 votes out of 95,000 in a contest which is still subject to a recount.

Only one chance is now seen for any action on the project in the near future. Kentucky's state legislature is overwhelmingly Democratic, and has the power to take the final say on the purchase away from the Board of Aldermen and vest it in the mayor.

Sharing the Risks

Merger in reinsurance field focuses attention on entry of U. S. firms into little-known business hitherto dominated abroad.

The policyholder rarely hears about it, but behind the direct insurance—fire, marine, casualty, and surety—written in this country there lies an elaborate system of reinsurance. A company that writes a huge fire insurance policy on a factory, for example, or that takes on a big indemnity cover for a contractor, will not carry all the risk itself but will farm part of it out to other companies. In this way, the underwriters spread their risks so that no one insurance company stands to lose too much on a single policy.

• **Foreign Grip Loosened**—For years, foreign capital has skimmed the cream of the reinsurance business in the U. S. Besides the ubiquitous Lloyd's of London, there have been Swiss, German, Scandinavian, and (before the revolution) Russian companies in the field.

American capital got a foothold in reinsurance during the first World War. Since then, the U. S. companies have grown rapidly, while their share of the total reinsurance business has increased somewhat more slowly. Insurance men hope that in the postwar period this trend will pick up speed and that the American companies will be able to cut



As director of the new General Reinsurance Corp., soon to merge with Mellon Indemnity Corp., Pittsburgh's Richard K. Mellon leads his powerful family interests into new fields.

Here's a Machine
that ***RUNS ITSELF***
WITH RELIANCE V*S DRIVE



Robbins Rotary Plow Feeder equipped with Reliance V*S Drive at ore-mixing plant of Colorado Fuel and Iron Corporation.



This materials-handling machine works like a robot—moving back and forth all day long at the exact speed required to plow a steady, uniform stream of material onto a conveyor belt.

Here is an application of Reliance V*S Drive which you may be able to apply profitably. V*S—the *all-electric, adjustable-speed drive operating from A-c. circuits*, provides smooth speed changes over practically an unlimited range, with automatic reversing, starting and stopping. Let a Reliance Engineer show you how V*S Drive—rotating or electronic system—can speed up operations and lower costs. Write for Bulletin 311.

RELIANCE ELECTRIC & ENGINEERING CO.
1069 IVANHOE ROAD • CLEVELAND 10, OHIO

Birmingham • Boston • Buffalo • Chicago • Cincinnati • Denver • Detroit • Gary • Greenville • Houston
Kalamazoo • Kansas City • Knoxville • Los Angeles • Milwaukee • Minneapolis • New Orleans
New York • Philadelphia • Pittsburgh • Portland, Ore. • Rockford, Ill. • St. Louis • San Francisco • Seattle
Syracuse • Tampa • Washington, D. C.

RELIANCE^{AC} DC MOTORS

"Motor-Drive is More Than Power"

Spending money for Sheffield Precisionaires, Visual Gages, Multichecks, Dial Indicator Snaps, Thredchecks, etc. . . results in saving money by slashing production costs.



MACHINE TOOLS • GAGES • MEASURING INSTRUMENTS • CONTRACT SERVICES

Mellon Indemnity Corp.'s contribution to the merger consists largely of \$6 million worth of assets. As a

[illegible]

Seemingly having lost his chance to capture Pullman's sleeping car business (BW—Nov.17'45,p20), Alleghany Corp.'s Robert R. Young began last week to give the railroads—the apparent winners—the public needle. Young, who was represented in the Pullman bidding by Otis & Co., Cleveland investment house, adopted the role of public benefactor in display ads run in metropolitan dailies by Chesapeake & Ohio and Nickel Plate—which Young controls. The ads again revived the idea of through coast-to-coast sleeping car service (BW—Jan.13'45,p19), which finds lukewarm favor with some lines, gives others the chills.



Mr. Mac Nab is very sad

MR. MAC NAB is a butcher . . . and a very unhappy one.

You know the trouble he's had . . . trying to keep his customers happy with a chop here and a tongue there.

And now he's discovered, for the first time, how much precious meat is wasted because of inferior refrigeration . . . and this new-found knowledge is like salt in a wound.

Cold air needs humidity to keep meat properly. Dry air tends to dry out meat . . . and even though Mr. Mac Nab trims off the dried-out parts like a diamond cutter, that meat is still largely wasted.

Mac Nab knows the answer to his problem, and as soon as he can, he's going to buy Carrier refriger-

ation equipment. For Carrier does far more than simply reduce the temperature.

Carrier refrigeration is really product air conditioning at low temperatures. For Carrier provides air with constantly controlled temperature, humidity and motion throughout the areas to be cooled.

Carrier founded the air conditioning industry nearly half a century ago . . . and has consistently led its development. In doing so, Carrier introduced the scientific principles of air conditioning to refrigeration . . . and thus enhanced its usefulness.

That is why you see Carrier leading the way in all types of commercial refrigeration from freezing

foods to providing the controlled climate needed in dairies and breweries, in hotels and hospitals, in the huge warehouses that guard millions of dollars' worth of food and other perishables.

Today, Carrier is quickly converting its resources to the manufacture of peacetime products . . . products that will soon give you the finest air conditioning and refrigeration the world has ever known.

CARRIER CORPORATION • SYRACUSE, N. Y.



AIR CONDITIONING • REFRIGERATION

This advertisement appears as a matter of record only and is under no circumstances to be construed as an offering of these securities for sale, or as a solicitation of an offer to buy any of such securities. The offering is made only by the Prospectus.

300,000 Shares

The Aviation Corporation

\$2.25 Cumulative Convertible Preferred Stock

(Without Par Value)

Price \$56 per Share

(plus accrued dividends from November 1, 1945 to date of delivery)

Of the above mentioned shares, 289,675 of such shares were offered for subscription at \$50 per share by stockholders of the Company. 230,626 shares were subscribed for by stockholders or their assigns and 2,000 shares have been reserved by the Company for possible issuance to stockholders whose subscriptions were received in irregular form. The 57,049 remaining shares plus the 10,325 shares not so offered for subscription comprise the shares being purchased for public offering by the Underwriters.

Copies of the Prospectus may be obtained in any State from such of the several Underwriters, including the undersigned, as may lawfully offer the securities in such State.

LEHMAN BROTHERS

EMANUEL & CO.

November 13, 1945.

OBLIGATION

Our War Bond dollars helped to make victory possible.

It is now our obligation to bring our armed forces home, care for our wounded, maintain our occupation troops, provide veteran rehabilitation, care for the dependents of those who made the supreme sacrifice.

BUY VICTORY BONDS

INTERNATIONAL BUSINESS MACHINES CORPORATION

casualty and surety underwriter the company has been practically dormant, maintaining only a handful of agents and handling a scant \$76,000 worth of premiums last year. General Reinsurance will slough off even this fragment of direct business. Professional reinsurance companies almost always fight shy of writing any policies themselves for fear of antagonizing the direct writers who originate their business.

• —Includes the Mellons—Perhaps more important than the additional capital is the fact that the merger will introduce the powerful Mellon family to the reinsurance field. Under the terms of the deal, the Mellons will receive 28% of the stock in the new General Reinsurance Corp. Richard K. Mellon and two of his men will join the board of directors. Equity Corp., New York investment trust, which now owns about 50% of General Reinsurance will get roughly 36% of the new company.

The entrance of the Mellons is significant because big American investors traditionally have overlooked reinsurance or have been hesitant about getting into it.

• For Experts Only—One reason for this state of affairs is that reinsurance, even more than direct writing, is a game for experts. The operator has to have a sort of second sight, or he winds up standing everybody else's losses. Europeans, including the British, got the hang of the thing generations ago, and have been improving their technique ever since. Americans are only now developing the same proficiency.

Another reason is that reinsurance always has been a bewildering subject to the uninitiated. Even a competent direct insurance writer sometimes swallows hard when he tries to follow the ins and outs of reinsurance.

• Volume Expanding—In spite of this, reinsurance is a fair sized business, and getting bigger. In fire insurance, where the practice has developed more highly than in casualty, primary underwriters ceded off an average of one-third of their direct premium volume during the ten years preceding the war. Professional reinsurance companies got about 11% of this third. The rest was split up among other direct writers.

In casualty insurance, the amount of reinsurance is smaller, probably running below 5%, but practically all of it goes to the professional companies.

• How System Works—Reinsurance companies get most of their business through standing contracts—called "treaties"—with the primary companies.

Typically, the reinsurance underwriter agrees that it will assume the risk on all policies above a certain amount. The direct writer stands the first loss up to the limit; the reinsurance com-



a Postwar Promise

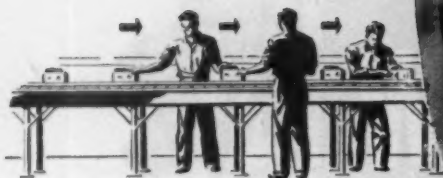
and you can bet that the automobile industry will keep it! The time is not far away when the motor car magic again will thrill you at your home-town automobile show. The industry, never one to rest on its laurels, has been making seven-league-boot progress during the war years. ★ Its war assignments were among the toughest. In making planes, guns, tanks, mechanized equipment, munitions and other war material, the motor makers were called upon for revolutionary technological progress. And they delivered. ★ Their war-won knowledge will make your new car a better one. So it are going new engineering achievements, new manufacturing techniques, new materials and new standards of precision manufacturing. ★ It has been our business for more than thirty years to manufacture fine precision parts for the automotive and aircraft industries. We work closely with the engineers. We are familiar with what is going behind the scenes. ★ That is why we say—"this is a postwar promise you can bet on."

For many years every motor car and truck built in this country has contained one or more Eaton-built parts.

EATON

EATON MANUFACTURING COMPANY • General Offices: CLEVELAND, OHIO
PLANTS: CLEVELAND, DETROIT, SAGINAW, MARSHALL, BATTLE CREEK, LAWTON, VASSAR,
MASSILLON, WINDSOR (CANADA)

1945 SUPPLIERS OF FINE PRECISION PARTS TO THE AUTOMOTIVE AND AIRCRAFT INDUSTRIES FOR MORE THAN THIRTY YEARS



To help keep
your production lines moving . . .
specify

Follansbee

COLD ROLLED STRIP

*Users of Follansbee Cold Rolled Strip
know they can rely on*

1. Prompt handling of inquiries and order schedules.
2. Rigid adherence to shipping schedules.
3. Strip which conforms to specifications accepted.

In addition, Follansbee's compact organization possesses a flexibility which frequently permits the adjustment of mill schedules to meet contingencies. Check with Follansbee General Offices—or the nearest Sales Office or Agency—on your requirements for Cold Rolled Strip or other steels.

FOLLANSBEE STEEL CORPORATION



GENERAL OFFICES • PITTSBURGH 30, PA.

Sales Offices—New York, Philadelphia, Rochester, Cleveland, Detroit, Milwaukee.

Sales Agents—Chicago, Indianapolis, St. Louis, Kansas City, Nashville, Houston,

Los Angeles, San Francisco, Seattle; Toronto and Montreal, Canada.

Plants—Follansbee, W. Va., and Toronto, Ohio

COLD ROLLED STRIP • ELECTRICAL SHEETS & STRIP • CLAD METALS
POLISHED BLUE SHEETS • SEAMLESS TERNE ROLL ROOFING

pany carries the rest. In the days the treaties often gave the writers a good deal of latitude in deciding which risks they would reinsure.

Primary companies then were inclined to think of the reinsurance companies as a handy place to work off mistakes. This idea gradually is giving way to participation in all policies, good and bad, over the specified amount that the direct writer wants to carry.

• **Fire Policies Lead**—Altogether, the insurance companies operating in this country do about \$70 million worth of business a year, in terms of net premiums written. Companies backed by foreign capital get about two-thirds of the fire business that is ceded off to professional reinsurance companies. In casualty reinsurance, the situation is reversed. American companies get two-thirds and the foreign companies the rest.

These estimates count the business done by domestic corporations and not by foreign capital, but they do not count the famous group of British underwriters known collectively as Lloyd's (REINSURANCE—Nov. 20 '43, p. 109).

• **By Remote Control**—Lloyd's keeps its business figures to itself, but insurance men estimate that it does a bigger volume of American reinsurance than any other operator. To the annoyance of the domestic companies, it has refused to take out a life license and write policies in New York. Instead, it handles everything from London.

The outbreak of war and the restrictions on sterling momentarily threatened Lloyd's supremacy. To handle the problem, Lloyd's set up a trust fund with the City Bank-Farmers' Trust Co. All American premiums go into the fund and all American losses are paid out of it. The fund started at \$40 million and is now reported to run at about \$100 million.

• **Reinsurance Reinsured**—Lloyd's gets a sizable slice of business from the reinsurance companies themselves. But the companies cannot afford to put too many eggs in one basket any more than the direct writers can. They take a "retrocessional" cover—that is, reinsurance of reinsurance—on the part they can't handle. Some of these retrocessions are made to other domestic insurance companies, but the last sort of the insurance business the world over always is to the pool of capital that funnels through Lloyd's.

Lloyd's is a group of underwriters, not a single company. The title of the largest single reinsurance operator in the world belongs to the Swiss company that controls two companies in this country—Swiss Reinsurance Co. (fire) and European General Reinsurance Co. (casualty).

MARKETING

Will Chains Stay in Packing?

Big food retailers' experiences with own slaughterhouses vary, but some admit they will unload plants. Others defer decision, hoping to force concessions from the big meat processing companies.

Independent retailers and meat packers who have seen in the big food chains' wartime acquisitions of slaughterhouses the foundation of permanent expansion in this field probably can soon allay their fears at rest. There are indications that the chains' experience in buying and operating meat plants has been too happy.

Some Will Unload—Some chains already admit privately that they will unload their plants as soon as they are able that they have seen the last of shortages. Others have adopted a policy of "wait and see." Apparently one feels that the experiment has been sufficiently successful to warrant further expansion without careful study. One chain, Kroger Grocery & Baking Co., sold its packing plant at Omaha, Neb., one of two it acquired during

the war, several weeks ago. This leaves Kroger with the Cook Packing Co. at Scotts Bluff, Neb., acquired last May, and the plant at Columbus, Ohio, which Kroger has owned for some 15 years. Combined capacity of these plants supplies about 20% of the normal meat needs of Kroger's retail stores; they can't take care of that much of current inflated demand.

Nonmoney-Making—Kroger officials admit frankly that the chain has never made a dime on its meat packing activities. The Columbus plant has actually lost money. From these admissions it can be assumed that Kroger may eventually get out of the packing business entirely when the remaining plants have fulfilled their wartime function of bolstering the company's supply position.

Although Safeway Stores, Inc., the

country's No. 2 food chain (Kroger is No. 3), is still studying the question of what to do with its slaughterhouses, grocery trade hears whispers that Safeway is ready to call quits. Safeway acquired nine meat plants during the war—more than any other chain.

Earlier Attitude—Whatever action may finally grow out of Safeway's experience in operating these plants, there is good reason to believe that the company once regarded them as a potential permanent addition to the chain's structure.

In Safeway's annual report for 1944, Langan A. Warren, president, discussed at length the expected future growth of all the chain's supplier and service companies. (In addition to its meat plants, Safeway owns bakeries, creameries, coffee roasting plants, an evaporated milk plant, a candy factory, and sundry other food manufacturing and processing operations.)

Warren's Appraisal—With respect to Safeway's meat business, Warren said: "Our stores are now taking good care of their meat customers, to a considerable extent because Safeway now has supplier companies engaged in assisting the distribution divisions in procuring meat and poultry from outside suppliers—in operating seven meat packing plants—in operating livestock buying offices and feed yards—and in operating two poultry dressing plants. . . ."

Warren concluded, "We can expect all of the supplier and service companies to increase their effectiveness, and to become influential factors in the post-war years."

National Tea's Experience—National Tea Co., which acquired two packing plants during the war, one at Milwaukee and one at Denver, will hang on to them at least until meat supplies are normal again. The Milwaukee plant seems to be firmly established as a part of National's operations.

The trade grapevine reports that National would like to unload the Denver plant, but the fate of this plant probably hinges on the outcome of the chain's current thinking about expansion.

Geographic Factor—If National, whose 800-odd retail stores are now concentrated in eight midwestern states, decides to expand westward, the Denver plant might prove handy.

American Stores, with three packing houses (Pueblo, Colo., Lincoln, Neb., Norristown, Pa.), is waiting for "developments" before deciding what to do with them. American's president, William Eden, will say only, "As long as it is profitable for us to operate the slaughterhouses, we will continue to do so." First National Stores, which bought the South Omaha Packing Co., Omaha, Neb., in 1943, likewise is undecided



CELESTIAL MOVIES

To relieve the tedium of overwater night flights, Pan American World Airways is offering its passengers the latest Hollywood sound releases—including educational travel films. The ice box in the galley of the plane mounts the 16-mm. projector, which is operated by the hostess; loudspeakers are mounted directly over the heads of the passengers.



CLEAN AIR COSTS LESS in kitchens, too!



How Engineered Filtration Reduces Your AIR-COST!

Grease and dirt from cooking vapors are no longer a costly problem when kitchen ventilating systems are engineered right.

In solving the problem, Air-Maze engineers developed a special Greastop* filter that removes grease from cooking vapors *before* it enters the ventilating system, thus keeping both the motor and ventilating duct work clean, and eliminating fire hazards and excessive maintenance.

This is a typical example of Air-Maze engineering that answers a specific need. In solving varied filtration problems during 20 years, Air-Maze has engineered over 3000 types and sizes of filters.

Let Air-Maze engineers work with you for the *right* engineered solution to your ventilating problem that will save you money. Write for complete information.

AIR-MAZE CORPORATION, Cleveland 5, Ohio. *Representatives in Principal Cities. In Canada: Williams & Wilson, Ltd., Montreal, Quebec, Toronto, Windsor; Fleck Bros., Ltd., Vancouver, B. C.*

*TradeMark Registered

IF IT USES AIR...USE
AIR-MAZE
ENGINEERED AIR FILTRATION



• Oil bath type filters and filter-enclosures • Cleanable filter panels for air-borne dirt, oil, grease and liquids • Oil-wetted type filters and filter-enclosures • Exhaust spark arrestors • Gas, odor, crankcase and back vent breathers • Oil-separators for engine crankcases • Full-flow type cleanable oil filters.

whether to stay in the packing business. • "Happy and Satisfied"—One experience seems to run counter to the general trend. Food Fair, Inc., with super-supermarkets (mostly in Pennsylvania and New Jersey), won't commit itself on future policy. But Food Fair president, George Friedland, says the company is "very happy and satisfied" with the two packing houses it acquired during the war. One of these, in Paul, Minn., has been leased since 1942; the chain owns the other, Elizabeth, N. J., outright.

Food Fair is atypical in that its sales, which account for some 25% of total volume (now at a rate of \$70 million annually), have actually increased during the war, by an estimated 5% while other chains' meat business has fallen off. If Food Fair continues to operate its own packing plants, as is not unlikely, it will use them to produce freeze and prepackage meats, putting the butcher shops on a self-service basis comparable to other departments.

• **Reserving Decision**—Food Fair reserves any final decision, however, Friedland, "Until we see how the packers treat us in the future."

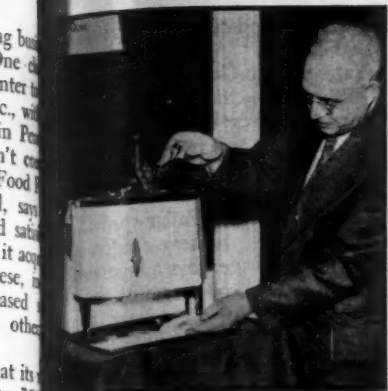
Not all chain store officials are as frank, but obviously they also regard their meat plants as an ace-in-the-hole in case the big packers prove intransigent about discounts and other special terms to which big retailers could not themselves entitle.

The chains' views on pricing are their best expression in Safeway's recent statement of its policies: "...the company hopes to see the adoption of the car-load or truck-load unit, sold delivered to one customer at one price, as the basis upon which the manufacturers will fix their lowest prices."

• **Out for Concessions**—With their facilities for centralized buying and warehousing, the chains are out to force concessions from price schedules generally based on l.c.l. shipments to individual store deliveries.

What is true of meat also holds for other commodities. Private brands were the chains' answer to the Robinson-Patman antiprice-discrimination law. A period of general prosperity, in which manufacturers are able to pick and choose among customers, refusing to give chains even those discounts to which they consider themselves legitimately entitled under R-P, might increase price-branding activities, by which the chains seek to achieve a price advantage.

• **Packers' View**—The big meat packers disparage the chains' sortie into slaughtering business. With meat scarce, the packers have noticed the effect on their own volume. Moreover, they claim that since the chains are equipped to salvage and market



SHOPPING SPREE

New York's National Hotel Expo-
n last week, buyers with a war-
look broke all records by placing
more than \$500 million in advance
orders. Devices like the novel butter-
maker (above), designed by Roches-
ter (N. Y.) Klean-Econ Butter Sav-
ers were attention-getters—but the
demand was for essentials:
socks, silverware, stoves. One ex-
hibitor said it would take two years
to produce and deliver his orders.

meats—traditionally the source of the
packers' biggest profits—it must inevi-
tably cost them more to kill their own
cattle than to buy it from the packers.
Chain store officials go along with
this view.

But by the old packers' consent de-
clined from getting into the retailing end
of the meat business, the big packers
were not inclined to look kindly on a re-
versal of this move by the food chains.
Inquiry Headed Off—An incipient
pressional investigation into chain
store purchases of meat packing plants
(Aug. 7 '43, p. 7) withered away when
the chains were able to show that they
had plenty of company, including a
number of independent retailers. Not
only retailers but canners (such as
Campbell Soup and Stokely), hotels,
restaurants were driven to slaugh-
tering their own meat in order to insure
supplies during the war. Many small
meat plants reversed the process,
opening their own retail outlets.

It may be significant that the big-
gest food chain of all, the Great Atlantic
and Pacific Tea Co., did not acquire any
meat plants during the war. A. & P.
was defending itself, in Danville, Ill.,
against charges by government trust
busters that its integrated manufactur-
ing-distributing-retailing operations have
been used as an instrument of monopoly
(Apr. 14 '45, p. 98).

Your business records are WORTH KEEPING

Keep them on paper
of proved resistance to time
and hard handling...

Weston paper

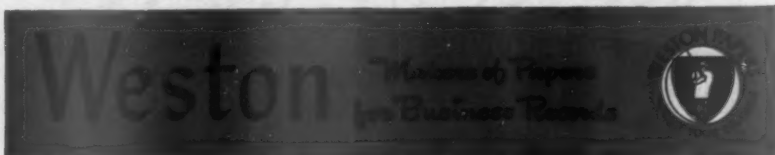


Key accounting records—legal and financial docu-
ments—insurance records—reports—executive cor-
respondence—records such as these are too
important to be trusted to all-purpose paper of
doubtful quality or stamina. They deserve a
foundation of paper worthy of the responsibility
for carrying valuable records—paper made and
tested specifically for the purpose—WESTON paper.

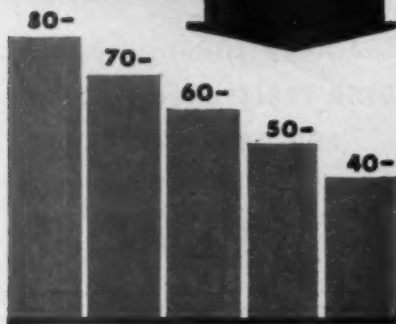
Records on Weston Cotton Fibre Content Rec-
ord, Ledger, Index and Bond Papers stand up
over years of active use. All you need to do to
assure your records lasting serviceability is to
establish this sound policy:

*If it's worth keeping,
keep it on a WESTON paper*

BYRON WESTON COMPANY, Dalton, Massachusetts



PAPER WORK COSTS ARE GOING DOWN —



with

VARI-TYPER*

From \$80.00 to \$40.00...from \$800.00 to \$400.00...savings such as these, averaging 49% and ranging up to 63%, are now being made on printed and duplicated jobs with Vari-Typer, the Office Composing Machine.

With Vari-Typer, your own typist composes text for reproduction. It looks like printers' type set work but costs far less. She makes a master copy of your work—forms, bulletins, catalogs, etc., for photo-offset or duplicator reproduction, using a selection of Vari-Typer's HUNDREDS OF INSTANTLY CHANGEABLE TYPES. Maximum eye-appeal is obtained in a minimum of space—two pages of average typewritten text require only a single page of Vari-Typing.

Thus, the over-all cost of any kind of duplicated job is less because you use fewer pages—which means less paper, less ink and less running and collating time. If the job is printed by photo-offset, the same savings show on your printer's bill—and the cost of typesetting is eliminated completely.

Discover Vari-Typer's advantages by sending for...A New Tool For Business. Ask for Folder..BW-11.

THIS TEXT COMPOSED ON VARI-TYPER.

443

RALPH C. COXHEAD CORP.
333 AVENUE OF THE AMERICAS, NEW YORK 14, N. Y.

*Reg. U. S. Pat. Off. and Foreign Countries.



Nylons Cheaper

OPA fixes ceilings at June, 1941, level. Yarn supply grows but shipments to retailers still dampen Christmas hopes.

Women could take comfort this week in the knowledge that when they get their nylons it will be at prewar prices if they are able to resist the blandishments of black market dealers and hold off until nylons are available from law-abiding retailers.

• **Rollback From 1942**—After months of pulling and hauling with the hosiery industry, OPA has finally fixed ceilings for nylon hosiery at approximately the price levels obtaining in June, 1941, before news of the impending silk and nylon shortages drove prices up to stratospheric heights. The new ceiling schedules, which will go into effect next week, represent a rollback of about 25% from the prices that were approved by the OPA in 1942, shortly before nylons disappeared into the depths of the black market.

Although many of them were opposed to any rollback (BW—Sep. 29 '45, p. 83), most hosiery manufacturers now concede that the new ceilings are pretty fair. Stable elements in the trade recognize that too-high prices might have been an invitation to a serious slump a few months hence, when the retail pipe-

line is filled and consumers are no longer nylon-crazy.

• **Yarn Supply Good**—OPA's order, manufacturers the wrong way in respect, however: Manufacturers must both branded and unbranded lines not increase their shipments of branded hosiery over proportionate prewar levels. This follows a similar provision in OPA's rayon hosiery order. Since branded hosiery enjoys a favorable price differential, this goes against the grain. Manufacturers no longer complain about the volume of nylon yarn they are getting from du Pont. Yarn shipments are now at the rate of about 1,500 lb. a month, enough for some 2,500 doz. pair of nylons monthly.

• **Timetable**—Shipments of new nylons to retailers so far have been minuscule, though this hasn't kept retailers from a noisy debate over how best to distribute them.

Textile World, a McGraw-Hill publication, gives an idea of the timetable manufacturers must meet if they are to bring women nylons in any volume for Christmas: "Five weeks from receipt of yarn to knitted fabric in quantity; one week from knitted fabric to gray finished hose. One week from finished hose to boxed and ready-to-ship hose. Two weeks from ready-to-ship to consumer distribution."

Meanwhile, shipments of rayon hosiery are falling off. Total shipments of women's full-fashioned hosiery (almost entirely rayon) were down 3.5% in the first nine months of this year from



FOR HAPPY PACKAGE AND PERSONNEL LANDINGS

Potential rivals of the parachute in delivering packages—and people—from flying aircraft are two devices, both operating without power. A fiberboard container (left), variant of the Army's experimental "maple seed" drop-deploy unit, has two 36-in. wings that open when falling, revolve like helicopter blades, assure a gentle spiral descent. The container, designed by Ford Products Laboratory, Madison, Wis., carries 75 lb., is said to cost under \$5, a fraction of the cost of parachutes with the same weight-carrying capacity. An experimental "Rotachute" (right) that works on the same principle has been developed at Wright Field to land 240 lb. of paratrooper. The craft is reminiscent of the "Hoppicopter" (BW—Jun. 16 '45, p. 28), an experimental helicopter that straps on like a knapsack.

Great Time Savers In Any Plant or Shop



**8" COMBINATION
BENCH GRINDER**

\$72.00

ALSO 6" AND 10" MODELS

There's no end to the uses for Black & Decker Bench Grinders . . .

Black & Decker Bench Grinders step up production all down the line—by making it easy to sharpen all tools quickly. And, spotted at handy locations about your shop or plant, they save steps and man-hours on an endless variety of grinding, wire brushing, cleaning, burnishing, buffing, polishing and finishing jobs.

What's more, Black & Decker Bench Grinders are engineered to get more done in less time. Powerful motors maintain efficient working speed under pressure.

Long wheel spindles and tapered end housings make it easy to get at the wheel with large or odd-shaped pieces. Tool rests and spark shields are adjustable. Grease-sealed ball bearings near spindle ends assure smooth operation. Advanced safety features protect your workers. And pedestals are made to fit all models.

Order Black & Decker Bench Grinders, Wire Wheel Brushes and other accessories from your nearby Black & Decker Distributor. And send for our catalog so you can check up on more than 100 other cost-cutting Electric Tools in the complete Black & Decker Line. Address: The Black & Decker Mfg. Co., Dept. 611, Towson 4, Maryland.

MANY ATTACHMENTS FOR MANY USES

FINE GRINDING WHEELS
MEDIUM GRINDING WHEELS
COARSE GRINDING WHEELS
GRINDING WHEEL DRESSERS
FINE WIRE BRUSHES
MEDIUM WIRE BRUSHES
COARSE WIRE BRUSHES
LOOSE COTTON BUFFS
SPIRAL-STITCHED BUFFS

LEADING DISTRIBUTORS



EVERYWHERE SELL

Black & Decker
PORTABLE ELECTRIC TOOLS

Build a Plant Down Where the South **BEGINS**



*It's not always the plant
—it's where you plant it!*

THE TOP OF THE SOUTH . . .
in the area between Richmond and Washington . . . offers a unique combination in both manufacture and distribution . . . a combination of quick and economical accessibility to the choice of American markets with the low-cost-production facilities of the South.

Manufacturers seeking a location or re-location of their plants will also find many other facets to this jewel of industrial opportunity: Superbly mild all-year climate. Home-loving, contented, native-born labor with know-how. Lower living costs. Lack of shipping congestion. Plentiful supply of cheap

electricity. An abundance of soft water in its natural state. **PLUS** reserves of mineral, forest and agricultural raw materials for a variety of industries.

Our great fleet of new fast locomotives, plus substantial additional trackage, acquired for our enormous war transportation job—and the operating experience gained—combines to assure the best in present and future Service.

We offer a complete and confidential Location Engineering Service without cost or obligation.

**RICHMOND
FREDERICKSBURG
AND POTOMAC RAILROAD**

JOHN B. WORDEGAT, TRAFFIC MANAGER,
RICHMOND 20, VIRGINIA

corresponding period in 1944. October is expected to show a much sharper slump.

• **Some Seamless—**Arthur production of women's full-fashioned hosiery runs between 40 million and 43 million dozen pairs. Although the expected 30-million dozen annual nylon production includes some seamless hosiery, seamless nylon will be competitive with full-fashioned rather than the cheaper seamless hosiery of other fibers. This is because nylon can be "preboarded" in the process of manufacture—given a shape which will hold permanently, without seams.

New Life for Co-op

Army and Navy association

featuring patronage dividends shows business gain for first time since Pearl Harbor.

Ever since Pearl Harbor, business has rolled steadily downhill for the Army & Navy Stores, Inc., a cooperative dating back to the first World War and no kin to the Army and Navy stores that retail government surpluses (BW-S-15'45,p83). Through it servicemen and veterans obtain a patronage dividend on purchases they and their dependents make from participating retail stores.

Last month the association's incoming transactions finally showed a return as its consumer members began streaming home from the war and retailers sensed the return of a buyer's market.

• **Dividends Vary**—Any member, or veteran, of the U. S. armed forces may become a life member of the association for \$3. Mailing his sales slips from participating stores into association headquarters brings him a dividend within two weeks. The rate is recomputed monthly on the basis of the association's net profit. Right now it's 3.01%; average for the association's 28-year history is 4.54%.

Membership for retailers is exclusive within a city or trading area. A retailer pays monthly dues of \$2.50 for his store and is billed for 10% of sales reported by consumer members—except for department stores and provision stores (milk, gasoline, etc) for which the rate is 8½%. Since this payment depends entirely on the consumers' initiative in saving and turning in sales slips, stores undoubtedly attract many Army-Navy purchases on which the retailers pay no fee.

Nevertheless, the traceable business from association membership is of considerable size: Miller Bros. Co., Chattanooga department store, is being billed for

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ed-in sales slips amounting to \$70,-
to \$75,000 annually.

Advertising Service—For this assess-
ment, which the association considers
ment for advertising services, the
receives (1) a listing in the di-
tory issued monthly, or quarterly in
time, to consumer members, (2) use
association mailing lists, (3) use of its
in local advertising, (4) proportion-
benefit from the association's adver-
ing in servicemen's magazines. About
the total consumer purchases fun-
through the association comes
men's and women's apparel shops;
other half is divided principally
ong retailers in jewelry, shoes, furs,
niture and other home furnishings.
The merchant-members also include
ndries, hotels, and other personal
vice business.

Although the association is a corpora-
on, it functions like a cooperative in
at its 260 stockholders receive divi-
dends only when the patronage divi-
dend equals 5% (they've had none since
1931), and the stock dividend can never
exceed 6%.

Patronage dividends paid since 1917
total \$6,373,073.45—up only modestly
from the \$6 million the association had
paid out by 1941 (BW—Apr. 26 '41, p. 52).
But the association expects purchases,
and therefore the dividend rate, to in-
crease as peace brings home the older
personnel of the regular Army and Navy
the backbone of the association.

Staff of 30 Salesmen—Normally mem-
bership is split about 50-50 between
officers and enlisted men, but most of
the 10,000 members added since 1941
are officers, simply because under mili-
tary regulations it was easier to enroll
them. Particularly fruitful are officer
candidates' schools; for example, 65%
with one recent class signed up.

The campaign for enlisted men will
come later—in fact, the association's 30
salesmen are still signing up veterans of
the first World War. It frowns on mass
enrollment because this nets plenty of
memberships but few consistent buyers
a profitless deal for the organization
since \$2 of the \$3 membership fee goes
to the salesman.

Having garnered a total of 269,000
consumer members so far, mostly from
the 4,000,000 first World War service-
men, the association talks confidently of
having 1,000,000 members in ten years
as a result of this war's 12,000,000 men
in uniform. Store membership, which
has declined to 1,450 from about 2,500
in 1941, has already begun to pick up;
its greatest increase, understandably, was
during the depression.

Promotion Plan—One device by which
the association hopes to boost its con-
sumer membership substantially is per-
suading businessmen to award life sub-



Tough...and gentle

The giant derrick is designed for husky dredge,
tug and barge lifts. But it can also handle this
small work boat gently. One reason for such versatility
is responsive wire rope equipment.

★ Two flexible Yellow Strand Braided Safety Slings
cradle the craft above. Conforming easily to the hull's
shape, they use a "soft," non-damaging grip that is equally
welcome in other industries for moving objects of
varied size and weight. Workers profit by corresponding
manageability in the hoisting rope itself when supplied with
Preformed Yellow Strand's limberness and kink-resistance.

Now that both patented constructions are more freely
available, make certain you specify Yellow Strand *Preformed*
Wire Rope and Yellow Strand Braided Safety Slings.

Broderick & Bascom Rope Co., St. Louis

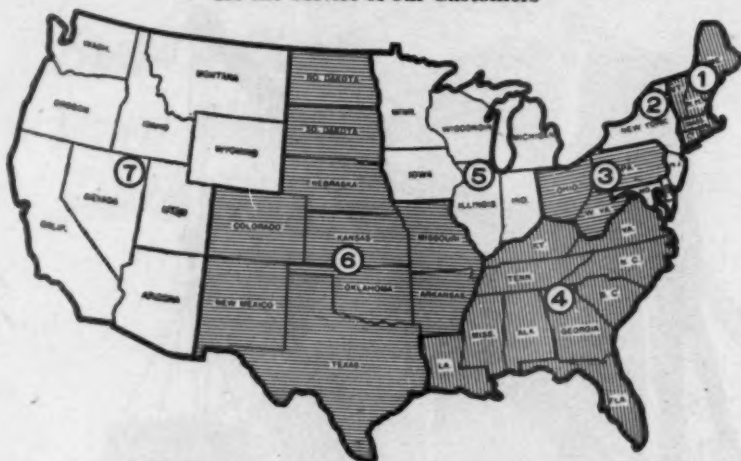
Branches: New York, Chicago, Houston, Portland, Seattle. Factories: St. Louis, Seattle, Peoria

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In Every State

This bank has customers in every State. For their convenience and service, the official staff of the bank is so organized that special groups of officers are in close touch with the business of these customers in various sections of the country.

This enables us to make our complete facilities of the greatest possible value to customers, with due regard for their local banking connections, affording the experienced and continuous individual service that is so desirable.

We shall be pleased to have inquiries from companies that desire the facilities of a New York bank possessing ample resources and affording every banking service for domestic and international business.

Guaranty Trust Company of New York

Capital Funds, \$310,000,000

140 Broadway
New York 15

Fifth Ave. at 44th St.
New York 18

Madison Ave. at 60th St.
New York 21

LONDON PARIS BRUSSELS

Member Federal Deposit Insurance Corporation

scriptions to returning veterans in the employ. It didn't have sufficient manpower to effect this promotion during the war while patriotism ran high and the tax structure would have speeded the burden.

INTERCITY TELEVISION

The Army-Navy football game in Philadelphia Dec. 1 will provide the "kickoff" for an experimental program of intercity television broadcasting on one link in American Telephone and Telegraph Co.'s growing coaxial cable system (BW—Jun. 30 '45, p. 82).

That game will be "piped" to New York and broadcast over NBC's television stations. Then, early in January, regularly scheduled intercity television will be inaugurated from Washington to New York. For this, A. T. & T. never-before-used coaxial from Washington to Philadelphia will be put in service (the war prevented installation of terminal facilities after the cable was in the ground).

The Washington-New York connection will be available, without charge, to NBC, CBS, and Allen B. DuMont Laboratories two nights a week during an extended experimental period. Others interested in television have also been offered use of the circuit.

Ordinary telephone circuits do not carry a wide enough band of frequencies to handle television. Coaxial, capable of carrying 480 simultaneous phone messages, can, however. But in doing so it utilizes the entire capacity of a single coaxial.

OPA EXHIBIT: IN REVERSE

In reply to the implications of the merchandise exhibits which retailers set up in Washington last week to show inequities in OPA pricing (BW—Nov. 14, p. 84), the agency's consumer advisory committee promptly arranged a counterdisplay of merchandise and posters to dramatize OPA's services to consumers in keeping prices down.

Exhibit A consisted of men's, women's, and children's shoes, designed to show that 1945 prices were practically the same as 1942 prices, despite the scarcity of leather. Other exhibits included women's apparel and boys' clothing, selected at random from Washington department stores, to show that prices on preticketed merchandise were invariably lower than on that not preticketed.

Claims and counterclaims of the opposing sides added up to what an disinterested bystander might already have concluded: that OPA had done a good job in some respects, had made a botch of it in others.

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The Compact DIEBOLD One Hour Method



DIEBOLD sets another milestone in achievement. This time it's "Flofilm"—in production *now*. This unique microfilming process is revolutionary in its completeness—its simplicity—its economical efficiency. It consists of cameras for microphotographing records, processors for processing the microfilm within one hour after exposure, right on your own premises, and reading projectors.

A million drawings or letters can be reduced to fit into a space no bigger than an ordinary four drawer letter file. Flofilm preserves priceless data in a form easily used, easily housed, easily protected.

1 Hour after Exposure !

You check original against copy. Also you save time in processing. You protect economically, you modernize your record-keeping. Yes, Diebold is introducing wholly new conceptions of microfilming with Flofilm. But, you must see the many new features to really appreciate the remarkable possibilities. Why not phone or write for "Flofilm" facts as they pertain to your record-keeping problems. Our men are trained to aid you.

DIEBOLD, Incorporated
Canton 2, Ohio



As soon as you expose a roll of 35 mm Microfilm on the Flofilm Camera (above) you can start it through the Processor (right) and begin exposing another roll.

You can use your 35 mm Microfilm in the motorized Flofilm Reading Projector... or slit it into two rolls of 16 mm Microfilm.

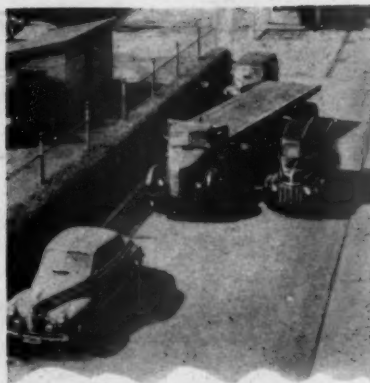
DIEBOLD

Since 1859

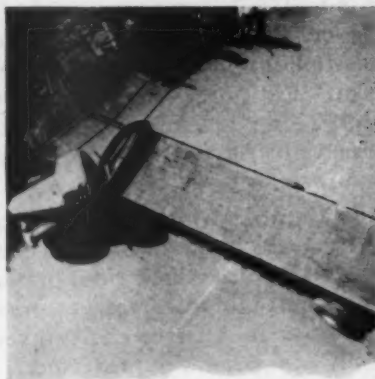
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The new Hoobler self-steering trailer undercarriage ... built by Union Metal ...



Snakes through traffic with the ease of a private car ...



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Increases payloads 40%, permits highway hauling of longer pieces than ever before.

TYPICAL of the engineering and designing skills which, for 38 years, have made Union Metal tops in steel fabrication, the Hoobler undercarriage promises lasting benefits to trailer manufacturers, truck operators, and shippers. It is also added evidence that the name UNION METAL on a product is a sure sign of quality, dependability, value. The Union Metal Manufacturing Company, Canton 5, Ohio.



UNION METAL
Craftsmen in Steel Fabrication

Uncharted Paths

Motorists will have to go along with prewar road maps for a while yet, as map makers struggle to reconvert.

Oil refiners, racing to reconvert filling stations to prewar standards of snappy service, are fighting a production pinch in the paper and map-making industries. This pinch is slowing down the reinstatement of an important customer-wooing service—free road maps.

Map makers are working hard to get production back to normal after a wartime rush of high-priority military map orders, but a trickle of reprinted 1942 maps is the only result so far. Most motorists will have to worry along for a while yet with well-thumbed, dog-eared prewar copies.

• **What's Ahead**—Three leading map makers—General Drafting Co., New York; H. M. Gousha Co., Chicago; and Rand McNally & Co., Chicago—these prospects:

(1) They will produce about 40,000,000 reprints of 1942 road maps, with minimum corrections to prevent glaring errors, by early 1946. These maps will be on substandard paper because of a shortage of the 20-lb.-to-24-lb. bond paper that is favored for road maps because of its fold and tear-resistance. Paper mills will not catch up with demand for the bond until far into 1946.

(2) By next Memorial Day—opening date of the 1946 touring season—filling stations may have 80,000,000 maps on hand (half on bond paper) and later printings should bring the year's supply somewhere near the normal 150,000,000 copies. By the year's end, paper supply should be near normal. Road maps for the 1947 touring season should be fully up to standard in paper quality as well as up-to-date markings—and with improvements.

• **A Standard Item**—Road maps, first produced 30 years ago, have become standard advertising expense for nearly all oil companies, large and small. In 1942, the refiners appropriated around 1¢ for every 40 gal. of gasoline sold for maps, which cost about 3¢ a copy. Map makers now are quoting prices 10% to 15% higher to cover increased labor and material costs.

Competition has forced more elaborate maps each year, but all concerned agree that there is still room for improvement—in legibility, map size, and folding.

• **Accordion Pleated**—One big problem—how to keep unfolded maps from crowding occupants out of a car—may be



PRESSURE-TIGHT LEAK-PROOF VIBRATION-PROTECTED

The Parker Triple Type Fitting proved itself so efficient and economical that its principle was standardized for Army-Navy use on aircraft and ordnance.

The flared joint of this fitting provides maximum "tightness" without strain or tension on the tubing itself. It is fully protected against leakage under pressure, and is safe in conditions of extreme shock and vibration.

Parker systems provide streamlined flow, free from obstructions, and are easy to install and service, even in hard-to-get-at spots.

Production released by reduced military needs now permits you to use Parker fittings, in a wide variety of types, sizes and capacities, for power and fluid transmission systems.

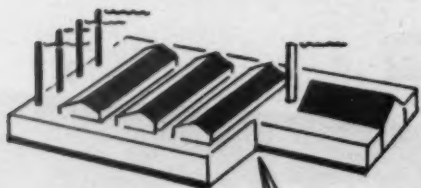
Immediate deliveries from Parker warehouses, or from your mill supply house. Information gladly furnished by Parker Appliance Co., 17325 Euclid Ave., Cleveland 12, Ohio.

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Electronic Tool of Business

Rauland AMPLICALL Paging and Two-Way Communications Systems are helping business swing back to peacetime production with an efficiency never before thought possible. AMPLICALL's ability to communicate instantly, locate in a hurry, save steps and time, actually multiplies manpower—gets much more productive work done daily! Find out now how you too, can put this Electronic Tool to work in your business—and at what low cost.



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2. AMPLICALL Paging Control Unit
3. W200 Series AMPLICALL Intercommunication unit with facilities for up to 24 master stations and up to 12 possible conversations simultaneously.

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Rauland

RADIO...RADAR...SOUND...COMMUNICATIONS
The Rauland Corporation . . Chicago 41, Illinois

solved in most 1946 maps by general adoption of the accordion fold developed shortly before the war. This permits the average map (folding into 4-in. x 9-in. packet) to be unfolded easily from side to side, each fold revealing one four-inch-wide full length panel of the map.

Some oil companies are toying with war-developed map improvements: luminous printing that made military maps readable at night with little or no light; resin-coated rag stock that could weather a typhoon and then dry quickly and be smoother than a gingham dress after going through the wash. But map makers say their cost makes them impractical.

• **Tour Service, Too**—Oil companies also are reestablishing tourist bureaus as adjuncts to their free map service. Continental Oil Co.—whose Touraide pamphlets of from a few pages to more than 100 pages of marked routes and travel data were one of the most complete hegira services—already has placed a big order for 1946 Touraides, at a cost averaging around \$1 each. Other oil companies offer similar services, but are cagey about revealing their plans for the future.



SEALED AND DELIVERED

Chicago's famous 3,000,000-sq.-ft. Merchandise Mart officially acquired a new owner as George B. Shiffington (left), acting for Joseph P. Kennedy, former Ambassador to Great Britain, accepts title from Marshall Field & Co.'s president, Hughston McBain. At one time the Windy City's No. 1 white elephant in real estate, the Mart today is bustling with business. Reports, which put the price at \$26 million (BW—Jul 28 '45, p. 52), indicate that under its new owner it will continue, as in the past, to function as a wholesale marketing center.

Chains Expand

Canada's leading retail merchants plan new outlets to hold monopoly on mail-order, department store sales.

The Big Two among Canadian department stores are quietly setting plans for maintaining their monopoly on expanding sales in Canada.

The T. Eaton Co., Ltd., and the Robert Simpson Co., Ltd., between them account for 82% of the department store and mail-order business in Canada, with Eaton's getting the larger share.

Three Major Chains—Both companies are currently engaged in appraising studies of consumer spending in war-expanded cities likely to retain a substantial number of the newcomers, with a view to building or acquiring new store outlets.

Canadian merchandising is unlike the U. S. pattern, in that the two largest department stores also rate as the two largest mail-order houses. The Hudson's Bay Co., in third place as a retail chain, focuses on outlying areas.

Eaton's is a family corporation and hence does not issue public annual reports. Hudson's Bay stock is held mainly in England, where the company was founded 275 years ago.

Retail Index Climbs—Simpson's annual report for 1944 showed profits of \$1,996,000 compared with \$1,495,000 in 1943. This reflects the steady climb in retail sales which pushed the Canadian retail sales index (1935-39=100) to 184.6 last August.

Total department store sales, including mail-order, in Canada for 1944 were \$361,257,280 compared with \$328,043,757 in 1943—a figure not much more than a third of the annual sales of Sears, Roebuck & Co. in the United States. The 10% increase in Canadian sales in 1944 is being duplicated this year, with the eight months' total for 1945 at \$226 million compared with last year's \$204 million.

Expanding Departments—Neither of the two leading chains will discuss post-war plans. Both in the past, and Simpson's as recently as last year, have purchased local department stores, reorganized their merchandising systems, and operated them without changing their names. Neither chain will say that this practice will not continue to be pursued as a method for expanding sales outlets.

Simpson's has plans to add new departments to existing stores. In Toronto, for instance, an adjoining piece of

Photoswitch Electronic Timers rely on CLARE "Custom-Built" RELAYS

For Fast, Smooth Accurate Control



The highly successful operation of the Photoswitch Electronic Timer on this Reed-Prentice machine tool—and on a vast number of diverse industrial applications—is enhanced by the efficient performance of Clare "Custom-Built" Relays.

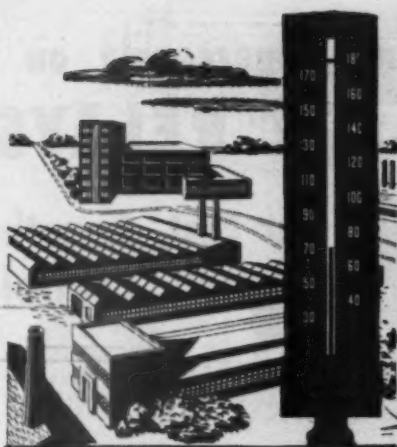
Electronic timing demands the highest degree of split-second accuracy, flexibility, and unfailing operation at all times. The Clare Type "GMS" Relay, because of its "fast operate—fast release" action, provides maximum smoothness, accuracy, interchangeability and freedom of maintenance for Photoswitch Timers.

Clare "Custom-Built" Relays have won increasing acceptance among designers and manufacturers of machine tools, alarm systems, electronic eye controls, radio, radar and other electronic controls because they are versatile, dependable, trouble-free, long-lived. They withstand severe shock... stand up under constant and extreme vibration, perform perfectly under rigorous conditions.

If you are designing new products, or improving older ones, your engineers will want to know how Clare Relays—regular or specially designed—can meet your own specific requirements. Write today for the Clare catalog and data book. Address: C. P. Clare & Co., 4719 West Sunnyside Avenue, Chicago 30, Illinois. Sales engineers in principal cities. Cable address: Clarelay.

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THE modern miracles of these magical materials depend upon controlled heat in their manufacture—which means that thermometers are vital equipment.

They should be American thermometers of enduring accuracy. For in addition to this fundamental quality, all American thermometers are designed for quick easy reading and constructed to defy time with its dust and damp.

In the standard glass thermometer, the wide-angled design admits the maximum of light through glareless glass. The red-reading mercury is a broad strip easily seen through the entire half-circle.

For every industrial use, and for all industrial ranges of temperature, there is an American thermometer exactly right for the purpose.

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BRIDGEPORT 2, CONNECTICUT

Makers of 'American' Industrial Instruments, Hancock Valves, Ashcroft Gauges, Consolidated Safety and Relief Valves. Builders of 'Show-Box' Cranes, 'Budget' and 'Load Lifter' Hoists and other lifting specialties.



Swanky and modern, an order office just opened in Ottawa is among some 300 operated by Canada's biggest department and mail-order stores, Robert Simpson Co. and T. Eaton Co., in communities which don't have regular outlets.

property the store has been trying to acquire for years has been bought for an annex. Other Simpson stores are in Halifax, Montreal, London, and Regina. • **New Outlets**—The T. Eaton Co. has indicated that its postwar plan includes the opening of a store in Vancouver, now Canada's third city, and possibly in a number of smaller communities. At present the company operates 46 stores across Canada. Its newest outlets, opened in 1940, are at Timmins and Kirkland Lake, in northern Ontario's gold mining district.

Hudson's Bay Co. operates stores in Winnipeg, Edmonton, Calgary, Saskatoon, Victoria, and Vancouver. In addition, it has dozens of outfitting stores in northern Canada, supplying fur trappers, mining companies, Indians, and Eskimos. Principal expansion will probably follow the frontier northward, where booming mining communities are in need of stores.

The mail-order business handled by Eaton's and Simpson's is estimated to provide between 45% and 50% of Canadian families with the bulk of their store merchandise, apart from food and fuel.

• **Order Offices**—With vast areas of lightly populated countryside, even the big Canadian stores cannot afford outlets to meet consumer needs and still make a profit. Consequently, both of the big mail-order firms have set up "order offices" in small towns, and between them operate about 300 such catalog shops. In many instances, these outlets do a land-office business.

Simpson's has, in addition to the retail stores, 33 agencies which operate

under the Simpson name or that of local merchants. Hard merchandise and household goods are featured by these stores. Some of them operate as directly owned outlets, others on a salary or commission contract for the local merchant.

• **Modern Systems**—Both Eaton's and Simpson's have developed coordinated purchasing and accounting systems, though many of the larger units do their own buying for certain lines of goods. Centralized accounting allows day-to-day check on sales. Simpson's, for instance, knows at its head office at 5 p.m. what store sales across the continent were at noon that day.

P. S.

After sniping at OPA reconversion pricing policies for months, washing machine manufacturers have now let loose a real blast. In a statement which condemns the 7.7% price increase OPA is allowing the industry as too little and too late, the American Washer & Ironer Manufacturers Assn. explained the situation to "millions of housewives, doing their best to make their rattley-bang superannuated washing machines last a little longer while they gaze yearningly at 'no-price' sample new models in shop windows." . . . Elizabeth Arden, Inc., cosmetic manufacturer, has asked the U. S. Supreme Court to review the circuit court decision which held that the company had violated the antitrust laws by granting one retailer a bigger allowance for "demonstrators" than was available to his competitor (BW-Oct. 27 '45, p. 86).

LABOR

Two-Way Bargaining Demand

Ford makes it plain that it's a fight to make "company security" equal to "union security." Five of 31 proposals hold widest interest in determining labor-management equation.

Into a fast-breaking, electric labor situation, considered the economy's paramount internal problem, the Ford Motor Co. last week tossed a delayed action blockbuster. Only now coming to be recognized for what it actually is, Ford's high-explosive package was contained in a letter to C.I.O.'s United Auto Workers.

Proposals of Its Own—The company's communication was in reply to the now-standard C.I.O. demand for a 30% wage increase. To that, the Ford reminder was an elaborate "no," and this made front page news. Interest in the news lay, not in the fact that still another auto manufacturer was rejecting the 30% demand, but that Ford debated the canard that the company had private wage deal with U.A.W.

Yet important as was Ford's notice to the union that the industry is standing together on the wage issue, that question, after all, will not remain unsettled for long. Of much more fundamental and longer-run significance is another issue which Ford opened, not for the first time, but on a level far beyond any developed before. Ford said it had some proposals of its own for amending its union contract, and it presented them with such force and cogency as to make U.A.W. reel.

Two-Way or Else—Among the 31 proposals for change in its contract terms which Ford has advanced are a number which other employers have unsuccessfully sought from the union with which they deal. Nor is there any reason for believing that the Ford management will have immediate success where others have failed. Boiled down to its essential point, Ford has said in effect that it's going to establish some two-way collective bargaining with the union by any means necessary to achieve it.

The Ford action highlights a reality that has too often been overlooked. Genuine collective bargaining—the kind referred to in the speeches of statesmen and the lectures of professors—is practically nonexistent. What operates in its place, as many employers know from hard experience, is the kind of thing illustrated by what happened to the



Pilot of the vast Ford empire, Henry Ford, II, wants collective bargaining—not union ultimatums.

New York Employing Printers Assn. on the very day Ford wrote its letter to U.A.W.

New York Ultimatum—Chicago employing printers had been presented with a demand for a wage increase and a 364-hour week. When they attempted to negotiate a compromise, their plants were closed down for 21 days and they capitulated. Then the same demands were presented to the New York employers on a "take it or leave it" basis. They took it, departing from this now familiar pattern of "collective bargaining" only to the extent of advertising their plight in the newspapers and proclaiming that "this was not bargaining of any kind—this was an ultimatum."

The "settlement by ultimatum"

which has replaced collective bargaining over a wide area of industry is the target of the Ford attack. The company is intent on restoring the give-and-take procedure which is the essence of all bargaining—and it wants bargaining concerned not only with union demands but also with employer demands.

Of Wide Interest—Moving toward this objective, Ford put 31 demands of its own on the agenda to which it and union representatives addressed themselves this week when formal negotiations opened in Dearborn, Mich. None of these are counterproposals to the union's demands; all are concerned with subjects on which the company wants to initiate discussions.

Of the 31 demands, many of which are indigenous to the Ford contract, five are likely to be of the keenest interest to management everywhere. The principal one is for "company security" to match the union security accorded U.A.W. through the operation of the union shop and checkoff. Ford wants "effective guarantee against work stoppages and for increased productivity."

What Ford Wants—Other important demands of the company include proposals for limiting the jurisdiction of U.A.W. by excluding from its membership certain classes of personnel as well as supervisors; for narrowing seniority rules; for preventing strikes or other interferences with production by making the union liable for damages resulting from a breach of contract on the part of its members; and for narrowing the authority and discretion of the impartial umpire (arbitrator) who is empowered to dispose of disputes arising under the contract.

It is obvious that these demands will not be realized overnight, nor in the course of one contract negotiation. But if Ford is serious—as it insists it is—all will be valuable trading material in negotiations. The company refuses to continue indefinitely so-called bargaining restricted to union demands. It wants give and take not limited to demands advanced by the union but expanded to encompass employer proposals as well. It is determined to put the Ford Motor Co. management back into the labor-management equation.

FEPC TRIMS ACTIVITIES

Orders closing, on Dec. 15, seven of ten Fair Employment Practice Committee regional offices and reducing Washington staff by 50% mean virtually the end of FEPC activities except in three industrial centers—Detroit, St. Louis, and Chicago—having a particularly serious problem of furnishing employment for minority groups.

FEPC was refused permanent status

THE LABOR ANGLE

Blow

The drive to repeal the unworkable Connally-Smith act is stalled because those who oppose the Wagner act now realize that the effectiveness of its instrumentality, the National Labor Relations Board, is more impaired by the strike-vote provision of the Connally-Smith law than by anything else that has ever been cooked up. Under this provision, NLRB's resources and staff are being diverted from enforcement of the Wagner act by the necessity of conducting strike polls in which results are foreordained.

However, if Youngstown Sheet & Tube sticks to its guns, and other companies follow its lead of refusing to cooperate with NLRB in providing lists of employees and other necessary data for the conduct of a strike vote, such passive resistance might force Congress to act.

Flaw

In the recent Transcontinental & Western Air, Inc., collective bargaining poll, won by the machinists, there were four unions on the ballot—A.F.L., C.I.O., United Mine Workers, and an independent. Such concentrations of organizing activities on the airlines by competing unions have resulted in more fault being found with the Railway Labor Act recently than at any time since it became law. This is important because sentiment exists for extending to many other industries this law which has lately been applied to the airlines and which has worked well in steam transportation.

Only the craft unions are happy over the effect of the Railway Labor Act in air transportation. Designed for the railroads, its provisions and administration favor craft divisions. Employers, as well as District 50 of the U.M.W. which is busy in the air transport field, favor two clean-cut bargaining units—one for employees who work on the ground and the other for flight crews. The act's administrators, on the other hand, habituated to the sharply defined occupational categories on the railroads, tend to cover the airlines' personnel setup by a patch work quilt of bargaining units which, frequently, is ill-suited to it.

District 50, for one, with some employer support is determined to get either the Railway Labor Act changed or get the airlines out of its coverage.

Retirement

The recent convention of the International Assn. of Machinists reduced the mandatory retiring age for its national officers and employees from 70 to 65 years. One of the few labor organizations in the U. S. to insist that its leaders bow out of the picture before they either die in harness or fail of re-election, I.A.M. is now assured of a new president in three years, Harvey Brown, its present chief, being 62.

It has been maintained that the reason why A.F.L. unions are wedded to the past and resist necessary change is, above all, the venerable age of the leaders of these unions. The four most influential officers of the federation—Green, Tobin, Hutcheson, and Woll—are, respectively, 73, 71, 72, and 66 years old. A 65-year retirement rule would catch them all, as it would John L. Lewis whose next birthday will be his 66th.

Exception

Robert H. Keys, president of the Foreman's Assn. of America whose fate is largely in the hands of the National Labor Relations Board, takes exception to reports that his organization is "contemplating" affiliation with the United Mine Workers. (NLRB is expected to favor giving bargaining rights to an independent foreman's union but will likely turn down supervisory organizations connected with unions of production workers.)

Keys points out that in Business Week of Oct. 6, and in several other publications subsequent to that date appeared reports starting with the news that his union was officially saying very nice things about John L. Lewis. That much is incontrovertible, but, feeling that the story had grown in the retelling, he was disturbed enough to wire NLRB that the public was being misinformed about what F.A.A. was contemplating. Keys is very anxious that NLRB be convinced F.A.A. is going to stay independent.

in a congressional fight earlier this year (BW-Jul.21'45,p98) and narrowly elected out the right to continue operation on a sharply reduced budget of \$250,000 for the year which began July 1. That amount, even spread thin, first forced sharp restrictions of the agency's activities, and subsequently caused Malcolm Ross, FEPC chairman, to order regional offices closed in New York, Philadelphia, Washington, Atlanta, San Antonio, San Francisco, and Los Angeles.

The agency's last campaign—unless the unexpected happens and revived legislation for a permanent FEPC can be pushed through a reluctant Congress—will be conducted through public hearings on racial discrimination in reconstructed automotive, metal fabricating, and aircraft mass-production plants. Charges generally are that plants are restricting their hiring to white workers, and that Negro war workers have suffered disproportionately in layoffs.

Selective Labor

Jobs go begging as workers spurn lower pay for unskilled tasks. Most openings call for men; women applicants lead.

It has been obvious since V-J Day that the prewar law of supply and demand is operating badly in the labor market. Hosts of unemployed job seekers are simply refusing to take the thousands of unfilled jobs in industry and that condition is exacting a toll on the nation's output of goods and services.

• **Altered Pattern**—A long-standing pattern has undergone a fundamental change which no one yet suggests is permanent.

For the present, it is clear, employers who, except for the war period, have been highly selective in hiring labor are willing and eager to hire almost anybody; while labor, normally desperate to exchange unemployment for any job available, disdainfully refuses the jobs being offered.

• **Conflicting Remedies**—But if it is clear why there are growing pools of unemployment in areas where plants clamor for manpower, what can be done about it has been the subject of sharp controversy.

The unions propose that the problem be dealt with by raising wages. Their theory is that war-weary workers will prefer idleness to accepting current job openings which, they contend, are at pay insufficient to support a decent standard of living.

Some management representatives, on the other hand, have maintained that



Waterproof clothing—thanks to chemicals—will mean new jobs.



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Making Postwar Jobs—Out of Chemicals

WHAT WILL the employment situation be—now that Victory has been won? Will there be enough jobs for returning soldiers, sailors, war workers?

No one can say, exactly. But this we do know: business management, in scores of industries, has long since laid plans for new products, new ventures, new services, that will make jobs by the thousands by creating new demands.

Take the chemical industry. Not only will it continue as one of America's basic job-makers, but from chemical research have come scores of new products that will mean thousands of new jobs in the future—products many of which were little more than dreams before the war.

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that will let you stroll in the rain and stay perfectly dry. Chemically treated pine furniture, hard as ebony, on which scratches and blemishes will not show.

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The chemical industry is only one of many along the Chesapeake and Ohio, the Nickel Plate, and the Pere Marquette that have planned for postwar employment.

And, now that the war is over, the chemical industry and other industries throughout the country will put into

operation their plans for the jobs and opportunities all of us want.

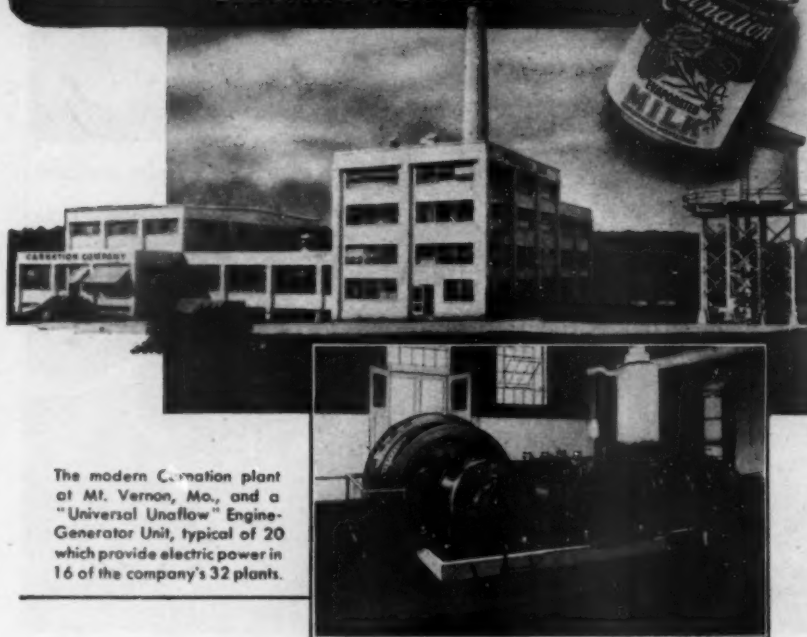
*A Report on the Prospects
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in the Industries Served by*

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the problem will disappear if the qualifications for drawing unemployment compensation are tightened. They point to the 1,700,000 unemployment benefit claimants during the first week of this month and assert that if these people were told to accept available jobs or forego their compensation payments, the jobs would soon be filled.

• **Neutral Zone**—Between these two conflicting points of view is a broad middle ground of opinion on which most neutral experts stand. This position maintains that the whole problem is of a purely temporary nature—that given another few months in which war-weariness will be erased and personal savings whittled down, the familiar scramble for jobs will be resumed.

The U. S. Dept of Labor and the Federal Security Agency, meanwhile, are undertaking to gather some facts on the nature and dimension of the current problem. It has just made available the findings of a three-city survey of what's become of war workers in the peacetime economy.

• **Tale of Three Cities**—Teams of trained investigators arrived at identical conclusions in Atlanta, Ga., Columbus, Ohio, and Trenton, N. J.:

(1) The labor market was inflated during the war by workers who had been especially trained in a single skill.

(2) There were few, if any, peacetime jobs requiring these special skills.

(3) The number of jobs available in all skilled categories had tumbled sharply.

(4) Lower-skilled jobs pay lower-rate wages, and workers' incomes have been reduced further by a return to the 40-hour week.

(5) While most job openings are for men, most job seekers are women.

• **The Jobless**—Women constituted 60% of unemployment compensation claimants in Atlanta, 69% in Trenton, and 77% in Columbus. However, between 60% and 81% of all job openings specified "men only."

Although 40% of the women in the three cities who applied for compensation either had been housewives or had not worked at all before the war, there still were more applicants previously employed in skilled and semiskilled jobs than there were openings.

Clerical, sales, and service jobs made up from 40% to 61% of the openings for women, but only 15% to 18% of the women had ever held such jobs.

• **—and the Unfilled Jobs**—From a dollar-and-cents standpoint, no jobs were open for women in Atlanta which would pay as much as \$45 a week, although 70% of the women applicants had earned that much. Half of the jobs open for women in Atlanta had a pay range of from \$20 to \$29 a week, and

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One of the many ways radar can serve aviation is by enabling the pilot to "see" through fog and darkness.

Radar - a "Moving Roadmap" for Flying

can now have an accurate radar "map" of the earth below—showing marks and major details of terrain. It will make it a whole lot safer to fly at night or in stormy weather—as well as in broad daylight.

is only one of the many possible uses for radar. For example, radar will show icebergs or islands many miles away day or night—and enable ships to avoid them. It will provide man with an amazing "sixth sense"—and will be used in many ways yet to be discovered.

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an additional 41% paid less than Georgia unemployment benefits (maximum (payable to most former workers) \$18 a week for 16 weeks.

In Trenton, women claimants been earning \$55 and more, but less than 1% of the job openings would pay that much. The situation was the same in Columbus, where 75% of the women claimants had earned \$40 a week more, but where there was not a job opening for women offering \$4 a week. Not working, they were eligible for a maximum of \$22 a week for 16 weeks in New Jersey; \$21 a week for 16 weeks in Ohio.

The average hourly rate for all jobs for women in the three cities was from 43% to 52% below the wage

were last earned by compensation
ants.

Unskilled Men, Unskilled Jobs—Men
similarly situated. In Atlanta, 50%
men claimants had held wartime
jobs, but only 15% of the recon-
struction job openings were for skilled
2% of the men had been laid off
unskilled jobs, but 59% of all open
were for unskilled labor. Prewar
held by the male compensation
ants leaned heavily to skilled and
skilled listings; only 11% had ever
employed as unskilled labor. The
figures pretty well reflected the
in Trenton and Columbus.

more than half the Atlanta men had
more than \$50 a week on their
jobs, but only 12% of the openings
time of the survey there called for
a week. In Trenton, 60% of the
had earned \$60 a week or more,
only 5% of the job openings were
\$60 and up bracket, while 67%
for wages under \$40 a week. In
bus, only 7% of job offerings
for the \$55-a-week earnings which
applicants reported as their last

ough some of the disparity was
investigators to a reduced work-
the average hourly wage rate on
jobs for men was 37% to 48%
their last straight-time rate. In
es, the survey showed:

Atlanta—Men, last jobs paid \$1.10,
jobs open 57¢; women, last jobs
jobs open 46¢.

Columbus—Men, last jobs \$1.11, jobs
72¢; women, last jobs, 99¢, jobs
54¢.

Trenton—Men, last jobs \$1.18, jobs
75¢; women, last jobs \$1.05, jobs
60¢.

Prefer Jobs—Despite the wage
limitations, the investigators re-
that many workers have been ac-
jobs instead of waiting out their
osation periods. In each of the
ities, slightly more than 40% of
ons who filed claims discontinued
presumably by accepting work-
drawing any benefits.

Releasing their reports, the Dept.
or and FSA expressed the opin-
findings would apply, generally,
ere.

It is no surprise to find that
ugh and Birmingham (Ala.) steel
urnaces, and ore mines—normally
ered high paying employers—are
undermanned while unemploy-
olls increase; and that Akron tire
tion is lagging due to manpower
es (page 15). USES reports in
these cities emphasize just what
pt. of Labor and FSA found: Un-
labor jobs, most of them in
industry, and job seekers just
atching these days.



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moting safety, training new workers, disciplinary problems, etc.
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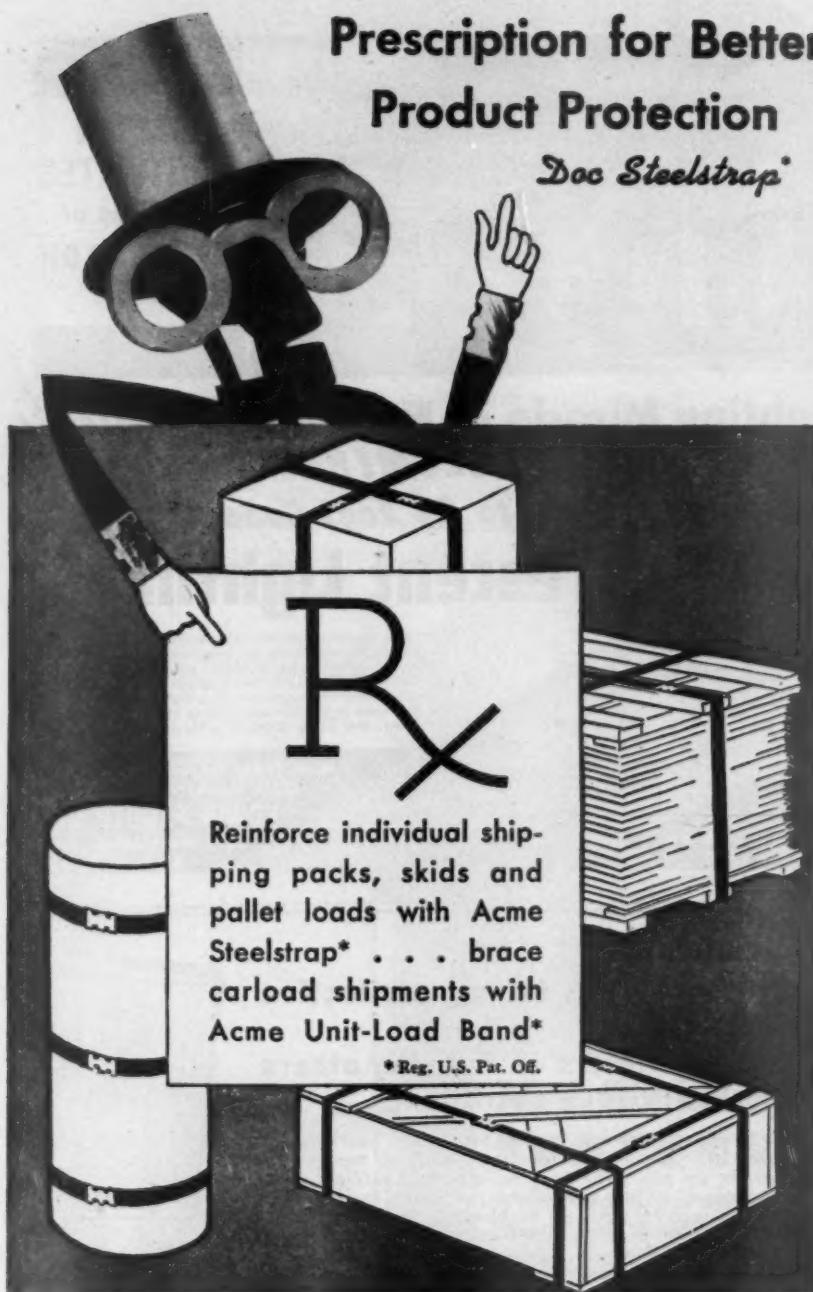
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A Point for War

Withdrawal of checkoff union-shop demands indicate that union feels its position weakening as showdown nears.

An offer of the United Retail, Wholesale & Department Store Employees' Union (C.I.O.) to withdraw demands for union shop and checkoff of dues from Montgomery Ward & Co. would lead to arbitration of other union demands. The company did little more than lay the cards on the table for a showdown with the company.

The hand it had to show wasn't strong, and there was little expectation, even in union circles, that the latest move would clear away ominous labor uncertainty hovering over the mail-order establishment (BW-Oct. 27 '45, p. 94).

• **Bid for Public Support**—The offer foregoes union security demands made in a "final message" to Sevel Avery, chairman of the Montgomery Ward board, and was an undisputed move for public support against one of the company's principal arguments that it would not sign any contract with the union because maintenance of membership and the checkoff are violations of the "personal liberty" of its employees.

If a strike now materializes, according to the union, the union-shop issue cannot be raised as a "smoke screen."

• **Weakened Position**—Actually, the move has a second significance in the union's future. As every union leader knows, the C.I.O. was sure of its ability to close Montgomery Ward, and keep it closed until it won its demands, it was not back away from its union-shop demands to court public opinion. Thus, willingness to arbitrate other issues, sacrificing the union shop, was a tipoff on a weakened position in the climactic fight.

Other issues which would be put to arbitration include a wage increase of 15¢ an hour, a 65¢-an-hour minimum wage, and the establishment of grievance machinery. Of the 21 initial issues in dispute, according to the union, not one has been settled through negotiations.

• **How Issue Was Drawn**—The present dispute came to a head when, after the turn of Montgomery Ward property to private ownership on Oct. 18, the company announced abolition of Army-enforced contract provisions for maintenance of membership and checkoff. The union took up the fight a week later and voted, through its executive board, for a strike "at the most opportune time" in nine of



DURANITE

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Not the least important aid in speeding volume production of urgently needed refrigerators, washing machines, ironers, and stoves is Duranite, the high speed production finish which cures in minutes instead of hours.

Equally important with speed in the production finish, is high quality in appearance and durability to insure top-notch consumer appeal.

Duranite, a plastic base finish developed by Atlas' Zapon Division, has all these attributes. It reduces curing time from a matter of hours to a matter of minutes. It prevents

corrosion . . . provides extra resistance to soaps, butter, and grease . . . retains its original lustre and color after years of use. It insures the touch of product glamor that catches Mrs. Housewife's eye.

Duranite, available in numerous finish formulations, is but one of many hundreds of new and useful materials developed by Atlas technicians. Separately or in combination, these materials offer an immense stockpile of ideas constantly used to improve products or processes.

You are invited to draw on this stockpile for help in solving your own product problems.

DURANITE—Trademark



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Industrial Explosives • Industrial Finishes • Coated Fabrics • Acids
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Protection
with
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Anti-Freeze *that's* **Anti-Rust, too!**

High resistance to boil-away
makes SUPER PYRO keep
up its faithful cold-protection
... for *Super-Safety!*

Besides, your radiator and
engine get extreme rust-pro-
tection from SUPER PYRO
... *Again — Super-Safety!*

Yet your first cost is low, and
you'll pay little all Winter,
using SUPER PYRO for
Super-Safety!

**SUPER
PYRO
ANTI-FREEZE**

A PRODUCT OF U. S. INDUSTRIAL CHEMICALS, INC.

company's mail-order houses, a number of warehouses, and several key retail stores.

The union estimated 75,000 of the company's employees would be affected by a walkout order.

No P.A.C. Test

Answer to question about labor's political power is not found in recent local election Committee points for 1946.

Those who hoped that recent off-year elections would answer their questions about the real strength of the C.I.O. and National Citizens' Political Action Committee should not attach too much significance to the Detroit mayoral defeat of Richard T. Frankenstein (B — Nov. 10 '45, p7) or to the results of wide scattering of minor races to which the name of P.A.C. was linked.

• **Local Skirmishes**—The voting indicated that, as a political force, P.A.C. still was about as much of a myth as most of the recent elections as in the 1944 presidential election when—riding on the coat-tails of the late President Roosevelt—it was magnified in importance many times over, particularly by its opponents. Whatever P.A.C. activity was noticeable outside Detroit prior to the Nov. 6 elections this year was on an autonomous local basis, and against the advice of national headquarters. Even at that, any influence of P.A.C. in most cases was more imagined than real. But the situation might be different in 1946, when P.A.C. hopes to be sufficiently canny, and strong enough organized, to link with one of the other of the major parties to swing elections to prolabor candidates.

Shrewdly looking ahead to the really important state and congressional elections, P.A.C.'s officers in New York where C.I.O. and National Citizens' organizations share a suite of offices, with different staffs—advised local leaders to test their political techniques by getting voters registered and out to the polls in 1945. They were warned against endorsing candidates for municipal offices, or running any candidates independently. The potential gains were small, and, as P.A.C. saw it, the danger of a split labor vote was too great as races based on personalities and solely local issues. The ultimate result might show in lack of unity in 1946.

• **Failure in Detroit**—Where local officials thought they had no alternative to an active role in the minor election P.A.C. urged (1) that every effort be made to get a full registration and



The Bars are Down -

In Norfolk and Western territory the bars are down — the gates are wide open — to industrialists who want to locate or relocate in an area ideally suited to their particular industry. Here you will find broad streams of pure water; an abundance of bituminous coal and power; plentiful skilled native labor; tax structures friendly to industry; a climate for year 'round production; close proximity to raw materials; and a transportation system second to none.

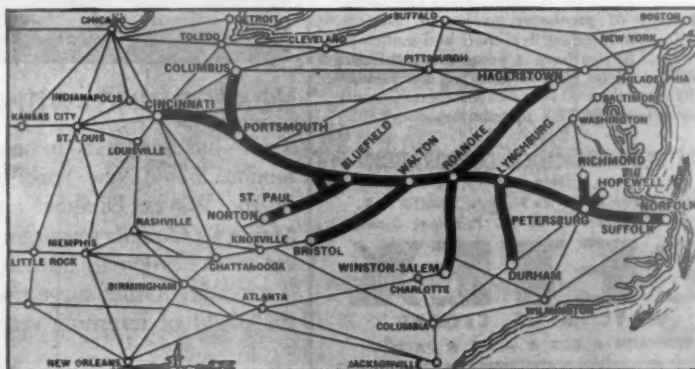
This ideal realm is served by Precision Transportation, the freight service of the Norfolk and Western Railway between the

Midwest and the year 'round ice-free port of Norfolk, Va., and midway between the North and South.

Over N. & W. rails, raw materials and supplies move on fast schedules; finished products are delivered swiftly to the markets of America, and to shipside for distribution to the markets of the world.

Let the specialists of the Norfolk and Western's Industrial and Agricultural Department at Roanoke, Va., give you details on this territory so favorable to industry — they know the section firsthand. Come right on in — "the bars are down."

**Norfolk
and Western
RAILWAY**
FOR BETTER PLANT LOCATIONS



DETEX keeps "watchful eye" on FLYING CLIPPERS 'round the world!

1. At Pan-American
maritime base in La
Guardia Field—
"Come in, Clipper!"
Dock area is all clear,
checked and double-
checked by DETEX
supervised Guard.



2. On the Clipper itself, mechanic registers station at instrument board to prove that he has carefully checked the myriad controls so vital to the efficient operation of giant ship.

Pan-American World Airways takes no chances with its Flying Clippers and far-flung air terminals that encompass 72 countries of the earth.

Carefully-trained Guards and Watchmen, supervised by DETEX Watchclock Systems, patrol strategic areas day and night to assure the safety of the world's greatest air transport system.

Pan-American knows there are no "ifs and buts" with a DETEX System. The record dial in back of each clock gives permanent, tamper-proof evidence of each Watchman's devotion to duty, proving the worth of a trusted employee—quickly exposing the shirker.

In small, single-watchman plants and in gigantic industrial establishments employing hundreds of protective personnel, DETEX stands guard against fire, theft and malicious damage. If you have a protection problem, DETEX will be glad to give you the benefit of its more than 60 years' experience. Consult your nearest DETEX distributor.

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near a 100% vote as possible; (2) that no candidate be chosen, or indorsed, from the ranks of union men, but that support go to a community-wide candidate known to be friendly to labor; and (3) that local "good judgment" be used on issues and collaboration with established political parties.

P.A.C., viewing Detroit, feels that its workers there failed to meet these requirements. Registrations were about 800,000, but only 501,000 voters went to the polls. Mayor Edward J. Jeffries, applying successful machine politics, got his voters out, but Detroit P.A.C., able to muster less than 1,000 precinct workers, did not. Frankenstein, a labor man, failed to attract sufficient nonlabor support, and the fact that he was a C.I.O. man made some A.F.L. and railroad brotherhood voters steer away. But, primarily, P.A.C. analysts lay the loss to failure to meet immediately a bitter racial campaign designed to turn anti-Negro prejudices against the C.I.O. candidate.

• **Division in Jersey**—Another defeat in the New Jersey fourth (Trenton) congressional district was attributed to failure of the local P.A.C. to coordinate its opposition to Republican Frank Mathews, Jr., with that of the local Democratic party. The P.A.C. and Democrats backed different candidates, who together outpolled Mathews.

P.A.C. lost in Philadelphia, Buffalo, Syracuse, and a number of Connecticut cities. It won minor races generally in Ohio, including Cleveland and Cincinnati, and was behind the winning candidates in New York City, Pittsburgh and Boston. But in most of these races its actual role was small, and it candidly admits the over-all result probably would not have changed materially if it had not appeared in the campaign at all.

Strike Law Next?

Difficulties of labor and management conferees give rise to forecasts that problem will be attacked by legislation.

The Labor-Management Conference was bogged down in verbiage and little else this week. The outlook for something substantial in the form of strike preventive machinery was so unpromising that even cautious observers were glibly forecasting that the problem eventually must be attacked by legislation.

One thing was certain: Congress was watching developments closely. Whether the conference will be considered a failure will depend in some



HOMECOMING—WITHOUT HOMES

Trim—but homeless—in new civilian clothes, veterans crowd the Hotel Commodore lobby, New York, to sign up for the 600 Bronx apartments vacated by the Waves. Disabled men, regardless of rank, get priority. Meanwhile, Mayor La Guardia was urging action to expand small housing units, was giving ear to the proposal, frowned on by realtors, to put up temporary dwellings if necessary. Other suggestions ranged from a request for state funds to ease the plight of returning veterans—to a plea to set up cots in the armories.



No such rude waker-upper at the Hotel Pennsylvania. But something you *do* hate to part with is a sandman-coaxing bed! One night's slumber on its many-coil built-in springs . . . its relaxing, foot-thick mattresses . . . and you're spoiled for life!



2. The Hotel Pennsylvania is certainly strategically located. Right in the heart of the city. Yes, you could actually throw a stone from the Hotel Pennsylvania to the railroad station—but don't do it. Seems there's a law against it!



Don't expect our chefs to rush in with fresh pheasants' tongues or humming birds' wings. But . . . if it's *meals* you covet—three unbeatable meals a day, marvelously prepared, nutritious, and deftly served—then—you guessed it!



4. How not to run a hotel—have town criers keeping you up-to-date with the news. Of course, you will want the news . . . and you want to stay abreast of entertainment and your favorite drama. *That's* why you'll find a radio in *every* room!



Laundry service . . . valet cleaning and pressing . . . eye-protective lighting in bed . . . *all* are naturally a part of the Hotel Pennsylvania service. *In addition*, there are always special services in an emergency. Take an emergency from A to Z—almost *any* emergency—then let *us* take it from there.



**YOUR DOLLARS ARE URGENTLY NEEDED
FOR VICTORY BONDS**

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1946



FRIDEN Fully Automatic Calculators

as if by *magic*...produce useable answers to your figure work problems. As seeing is believing...telephone or write your local Friden Representative and conveniently arrange for a demonstration. Learn why a Friden is so simple to operate; that anyone in your office can be taught to produce *accurate answers* on your own work, with less than 15 minutes instruction. Through efficiency of effortless productive operation, this modern calculator will pay for itself in any business, large or small. Remember only with a Friden... the calculator, not the operator, does the work.

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FRIDEN CALCULATING MACHINE CO., INC.

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measure on what one expected. Many expected little and probably won't be disappointed.

• **Success or Failure?**—Undoubtedly, negotiations and recommendations will emerge in orderly fashion and the appearance of a collapse will be avoided. Four weeks of conversations will produce a better mutual understanding of problems. To that extent, the conference may be said to be successful. It will have fallen far short of President Truman's target: securing labor peace.

If the conference fails to produce recommendations, and if Congress thereafter enacts strike legislation, the conference will surely be called a failure.

The McMahon bill (BW—Aug. 1998) is viewed as the least objectionable of the proposals now before Congress. Whether the conference can be persuaded to recommend it, by name or implication, is doubtful.

• **One Line of Reasoning**—The argument is heard that unless both sides agree upon a formula such as the McMahon bill, they run the risk of doing something they might regret.

The McMahon bill is quite innocuous and, except for labor's part, against labor legislation in general. It would have a good chance of passing. It involves no compulsion, except as it sets public opinion in motion. It brings that pressure to bear on both of the quarreling parties.

The bill would expand the Conciliation Service and set up an arbitration board. The arbitration setup, particularly, would be "sold" to the U.S. public, it is hoped, in such effective fashion that only the most defiant employer union would dare not to use it.

• **Taylor vs. Lewis**—Dr. George W. Taylor, the conference secretary, has been trying to nudge the conferees generally in the direction of over-all dispute machinery, some sort of successor to the National War Labor Board—though not necessarily a government agency. In course, he has encountered a strong obstruction in the form of John L. Lewis.

Taylor wants the conference to proceed, but Lewis suspects him of doing a job at the head of some permanent labor-management organization.

The miners' chief has not forgotten the NWLB's role under the leadership of Dr. Taylor in the bitter 1943 fight for portal-to-portal pay.

• **An Interruption**—When Taylor was in the executive committee meeting last week and proceeded to make a report, committee by committee, he was interrupted by Lewis.

"Dr. Taylor," he boomed, "paralyze me with all those details." Taylor retired.

C.I.O. President Philip M. Rand

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ge resolution seemed to have not the
best chance of getting through, but
on the outside it appeared that Mur-
could well afford to take that beat-
From the working man's point of
view, his argument looked good. The
F.L. and Lewis are in the difficult
position of explaining why they wouldn't
support the President's declaration on
the necessity of wage increases.

Fingers Crossed—A recommendation
for an arbitration clause in all agree-
ments has a fair chance of emerging
from the conference, but both sides
have their fingers crossed.

The A.F.L. building trades look with
a fishy eye on anything which forecloses
their right to strike.

Employers, on the other hand, are
tired of saying that all disputes arising
during the life of the contract are
arbitrable. That would be a broad field
which might encompass production
standards or anything else which man-
agement believes is exclusively manage-
ment's.

Health Service

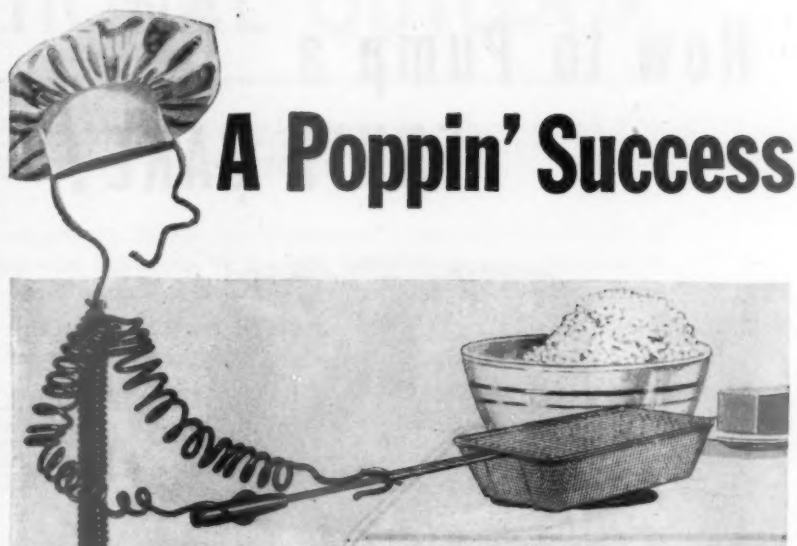
Group medical programs,
in line with a union objective,
are gaining impetus as result of
drive by insurance companies.

Expansion of collective bargaining
agreements which now provide for hos-
pitalization is being made an important
objective of labor, which hopes to ob-
tain comprehensive health service well
in advance of any program that might
be set up by state or federal action.

While unions conduct their cam-
paigns for broader medical care—such as
that obtained under contracts of the
A.F.L. International Ladies' Garment
Workers Union (BW—Sep. 22 '45, p107)
—collateral drives by insurance com-
panies are appealing to employers to
adopt voluntarily programs giving the
same general coverage and financed
either wholly or in part by employers.

Company-Financed Plan—Typical is
the sales job being done by the Equi-
table Assurance Society of New York,
which recently signed Abbott Labora-
tories of North Chicago, Ill., to a pro-
gram which gives Abbott employees
throughout the country medical expense
coverage paid for entirely by the com-
pany. The program also provides that
employees may have the coverage ex-
tended to their families for a flat pay-
ment of \$1.50 a month, regardless of
the number of dependents.

There is no union at Abbott.
50 Visits a Year—Included in the
Abbott-Equitable medical care cover-



THE U. S. LINE * **CORN POPPERS**

made with

KEYSTONE
Wire

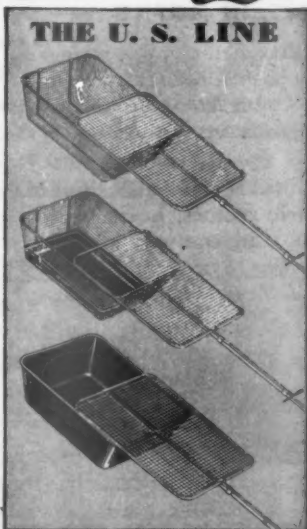
A corn popper is a small item, but mul-
tiply it by the hundreds of thousands
produced by the U. S. Manufacturing
Corporation each year, and it adds up
to a lot of enjoyment in homes the
country over.

Into U. S. corn poppers and fly swatters
go hundreds of miles of Keystone wire.
The U. S. Company finds, like so many
other manufacturers, that for fabri-
cating speed, uniformity and dependa-
bility, Keystone wire deserves first
consideration.

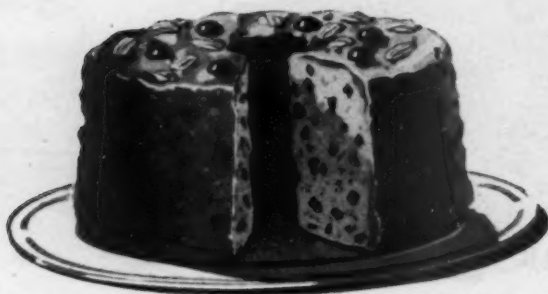
We are indeed proud that the U. S.
Corporation, a leader in its field, uses
Keystone wire.

*U. S. Manufacturing Corporation, Decatur, Ill.

KEYSTONE STEEL & WIRE CO.
PEORIA 7, ILLINOIS



How to Pump a FRUIT CAKE!



Those crunchy hunks of peel and citron that make fruit cake such a tasty treat present a real handling problem to the big producer. After cooking in sugar, the pieces are screened out, but some pass through with the heavy syrup—and that makes pumping *doubly* difficult.

IT TAKES MORE THAN JUST "PUMPING"

Ability to move this *lumpy, sticky fluid* without clogging is just *one* of the requirements. Since the material is a food product, the pump must be easily and thoroughly *cleanable*. And, because the remaining citron and peel are recovered later, the action must *not* disintegrate the pieces. Yet the problem isn't as tough as it seems, if you know about Moyno pumps.

At Bear-Stewart Company, Chicago manufacturers of bakers' supplies, it is not unusual to handle 10,000 gallons of syrup in 24 hours, yet in over a year of operation, Bear-Stewart maintenance men have never seen the *inside* of their Moyno.

GET THESE EXTRA ADVANTAGES, IN MOYNO

No other pump is like the Moyno. It handles virtually *everything* from free-flowing liquids to non-pourable pastes, *resists* abrasion and acid attack, passes particles, operates with *low* internal turbulence, delivers in continuous flow—stands up where other pumps *fail*.

Send for our new book, "A Turn for the Better in Positive Pumping." And ask us, too, about electric motors, hoists and cranes, industrial ventilating equipment, and compact speed-change machine drives. *Robbins & Myers, Inc., Springfield, Ohio.* In Canada: *Robbins & Myers Co. of Canada, Ltd., Brantford Ontario.*

The Moyno has no pistons to score, no valves or other flow restrictions. Rotor and stator work together to form ever-changing seal lines. Replacing these two elements restores original efficiency. Thousands are in use on every type of service.



ROBBINS & MYERS, Inc.

FOUNDED 1878

MOTORS • HOISTS • CRANES • MACHINE DRIVES • FANS • MOYNO PUMPS

age are maximum benefits of 50 years for each dependent by a physician of his own choice (who may bill insurer for \$3 per home call or \$2 office or hospital call) and laboratory fees and examinations, costing up to \$25 a year for each dependent.

Similarly, United Medical Service, Inc., sponsored by the Medical Society of the State of New York, in connection with 17 county medical societies, recently announced it was opening contracts for group contracts providing medical, surgical, and maternity care, including after-care in the home and doctor's office. The announcement said that contracts would be issued to employers and would be limited to groups of 50 or more employees.

• **Monthly Rates**—United Medical Service's coverage will cost \$1.60 a month for individuals or \$4 a month for husband and wife and all children under 18 years of age. Full coverage will be limited to those families with less than \$2,500 a year income; partial coverage is provided for all others.

Subscribers will be entitled to a visit a day from their doctor, with up to 20 visits for any one illness, injury or pregnancy. The insurer will pay attending physicians \$3 for home or hospital visits, \$2 for office calls.

• **Time, Inc., Signs Up**—With no extensive actuarial experience to fall back on in launching its new program, United Medical Service limited its first test coverage to 25,000 enrollees. Time Inc., was the first employer to sign up with 1,234 potential enrollees from four magazines and newsreel production units.

Time agreed to pay the entire premium cost. Other employers who sign contracts may elect either to handle premiums on that basis or to pass them on wholly or in part to employees.

• **Associated Hospital**—The medical care plan is comparable to the hospitalization program of the Associated Hospital Service of New York, a Blue Cross affiliate. Associated Hospital Service recently announced that between September, 1944, and September, 1945, hospitalization benefits were incorporated in more than 340 collective bargaining agreements with 31 A.F.L. and C.I.O. unions in New York City, and covered some 175,000 employees.

In more than 75% of the agreements employers assumed the entire cost. Where coverage is extended to families more than 50% of the agreements provided that employers also pay the full amount of the additional premiums.

At about the same time, United Medical Service, Inc., announced its prepaid medical service coverage—prior to the start of the group plan—was 137,000 persons in New York.

THE INTERNATIONAL OUTLOOK

BUSINESS WEEK

SEPTEMBER 24, 1945



Fresh complications have developed in connection with the U. S.-British commercial policy negotiations in Washington.

London, in reluctantly accepting Washington's demand for interest at 2% on the pending loan, has asked for a waiver clause allowing postponement of settlement in years when Britain's balance of payments is unfavorable.

Presumably this request is made primarily to cover the first three or four difficult years of transition from a war to a peace economy.

But Washington, in acceding to the British request, has demanded a voice in determining when Britain's balance is unavoidably adverse and in seeing that British basic trade policy is promptly revised to bring about a correction.

The to-be-expected cry of "Shylock" came promptly last week when Sir Stafford Cripps, president of the Board of Trade, warned Washington indirectly in a Manchester Chamber of Commerce speech:

"Britain won't become an economic fief of any other country. We will work out our own salvation by our own strength."

Device most likely to resolve the current deadlock on this issue is that the multiple-membered Bretton Woods organization be allowed to determine when London's shortage of dollars for repayment of interest and debt is a legitimate claim and not a matter of rigged accounting.

Sharp bargaining is continuing as the two sets of determined negotiators maneuver for advantages.

Whether the loan total is finally set at \$3,500,000,000 or \$4,000,000,000, don't overlook the fact that other credits are open to the British.

At least \$500,000,000 is available to cover the cost of goods caught in the lend-lease pipeline when the wartime operation was abruptly discontinued.

In addition, London almost certainly will be figured for a credit in the settlement of deadcat items connected with the wartime exchange.

Thus, while the U. S. is likely to be allowed a sizable refund on wartime Suez Canal tolls, this will almost certainly be more than balanced by credits to London against claims for factories built by Britain in the U. S. with British funds before lend-lease was initiated.

Other concessions to the British are in the making.

(1) London, while offering lip service to Washington demands for freer world trade, wants the right temporarily to continue import controls through the use of a licensing system or further bulk buying by the government of basic food and industrial raw commodities.

(2) Britain, while not seeking general export controls, will insist on the right to regulate—on the basis of humanitarian demands—the flow of outbound shipments of foodstuffs and textiles.

(3) The Labor government, through its growing control over finance and credit, can be expected to exert whatever influence is necessary to channel incoming raw materials to the export industries and provide whatever machinery is required for the modernization of industry through plans gradually unfolding in London.

THE INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

NOVEMBER 24, 1945

All these demands on both sides are responsible for this week's tension in U. S.-British economic relations.

Typical of the harsh threats bound to characterize many U. S.-British commercial negotiations in the immediate future is London's blunt warning to the U. S. movie industry that, unless British films can earn more dollars in the U. S., Hollywood film executives must expect a slash in British earnings.

U. S. earnings on films showing in Britain this year are running at the rate of nearly \$75 million, compared with prewar levels of around \$30 million.

It is useless to expect from this Administration any decisive action regarding Argentina, and business should lay its plans accordingly.

Despite Assistant Secretary Spruille Braden's blustery but vague threat to the Peron regime last week, Buenos Aires is getting anything it wants from Washington except guns.

As a result, exports to the Argentine will expand during coming months when companies such as General Motors—now fully aware that Washington's diplomatic threats are no more than so much wind—put into effect their plans for the gradual resumption of trade.

G. M. has just finished contracting sufficient dollar exchange to cover imports into Argentina of the company's first postwar delivery of 350 cars.

Other U. S. interests, alarmed at the inroads being made by Swiss, Swedish, and British manufacturers, are making similar plans to resume business.

More than a little disgruntled by this country's tendency to look down its nose at the Argentine and fully aware that it has nothing to lose by its action, Buenos Aires has inaugurated weekly broadcasts to the U. S. in English.

"Listen to the voice of the Argentine Republic" can be heard over U. S. shortwave sets each Friday afternoon at 4 o'clock, New York time (1 p.m., San Francisco).

After listening to shortwave radio propaganda from the U. S. all during the war, Argentina has decided to put out its own brand—in English, French, and Portuguese, as well as Spanish.

Don't miss the significance of a Soviet economic maneuver in the Far East which is likely to cause diplomatic repercussions at some future date.

Despite manpower shortages at home, Moscow has sent a party of Soviet industrial and mining experts to China to discuss with Chiang Kai-shek's War Production Board and his Ministry of Economic Affairs the possibility of Sino-Soviet economic cooperation.

Foreign governments are increasing their participation in industry in two significant recent moves:

(1) In Canada, 41 small industrial enterprises are moving into two government-owned, wartime-built factories at Montreal and Toronto, under the multiple-tenancy plans for government-owned plants. Employees now total 2,000 but the number is expected to double.

(2) In South Africa, the government has decided to manufacture DDT and certain other chemicals for peacetime use in combating diseases and pests. Distribution, however, will be through private commercial channels.

BUSINESS ABROAD

Harbor Trouble

Argentina's muddy ports, particular that of Buenos Aires, present uninviting, hazardous prospect for peacetime shipping.

BUENOS AIRES—Although political and diplomatic difficulties may further delay the long-heralded resumption of United States shipping activity in the River Plate mouth, foreign shippers should not overlook the critical harbor situation that will surely develop even as trade reaches prewar levels. Practically all of Argentina's ports are on the heels.

Weeks of Delay—Recent incoming ships have been held up for weeks as ships could be discharged. Dredging of port entrances and dock areas is grossly inadequate. As a result, large ships now coming in are virtually bogging their way through mud to dock. Sections of many harbors are impassable because of silt accumulations. There is a severe shortage of freight and barges, while most of the lifting equipment is obsolete and much of beyond repair.

cargoes of coal, now arriving from the north, are unloaded with buckets and shovels.

Red Tape—Freight rates are heavily weighed with port fees and fines, customs regulations, and other red tape. Migration policies are outdated and sometimes absurd—a ban on cripples recently prevented landing of a war veteran in Buenos Aires.

Argentina's domestic and foreign water transport is served by 80 harbors—70 of them government-owned. Capital investment in port facilities amounts to 750,000,000 pesos (roughly \$180,000,000). Ports stretch along a 3,700-mi. coast from Tierra del Fuego in the south to the shallow waters of the Uruguay and Parana rivers in the north.

About 20 ports handle ocean shipping, but five account for the bulk of the tonnage—Buenos Aires, La Plata, Montevideo, Santa Fe, and Bahia Blanca.

Shallow Estuary—Ships entering Buenos Aires—100 miles from deep water—are faced with desperately difficult conditions. There is no such thing as a tide gauge for the River Plate estuary. The difference between high and low water varies from tides—is as much as 14 feet, due to variations in rainfall in the hinter-

In addition, depths in the estuary are

affected by continuously fluctuating winds. Strong steady breezes sometimes expose large mud banks. In 1927, shippers recall, a Greek freighter heading for Parana in ballast was grounded for 13 months before a strong gale refloated it.

To clear the road for incoming ships last year, 34 dredging boats, operating steadily, removed more than 21,000,000 cubic meters of mud.

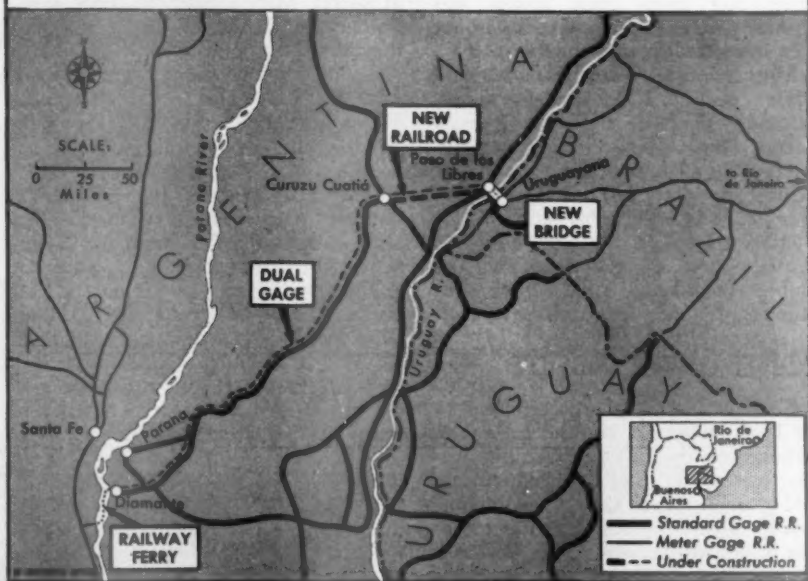
• **Principal Port**—Buenos Aires harbor accounts for 55% of total port investments and normally receives 80% to 85% of the country's imports, on which

\$10,000,000 in port fees, fines, and services are collected.

Keeping the port clear of silt is therefore an essential task. Of last year's total dredging, 70% was in the estuary alone, extracting mud from the 27-mile channel leading to the harbor. This is supposed by law to be kept clear to a depth of 27 ft., but shippers are alarmed at the number of ships which have recently grounded. (A Liberty ship draws 28 ft. and the Victory slightly more.)

• **Harbor Shrinks**—In the harbor itself, silt has been deposited 10 ft. deep in spots. With depths ranging from 22 to

BRIDGING A BORDER



Next month, Brazil and Argentina will dedicate a cooperatively built bridge (below) linking the two countries by road and rail. The span is 5,924 ft. in length and will carry a pedestrian walk, a two-lane road, and a meter-gauge railway track. As a link in the Pan-American Highway, it will connect Rio de Janeiro with Buenos Aires. A 60-mile rail connection will link the bridge with Curuzu Cuatia, and a third rail will be laid on the new line and for 315 mi. along the standard-gauge line to Diamante to permit Brazilian and Argentine meter-gauge trains to cross the international border. Brazilian trains will then be able to reach most parts of Argentina, and Chile and Bolivia as well.



33 ft., and a total quayside of 95,000 ft., the port was capable of mooring 100 freighters in single file, before the war. Today there is hardly enough deep water to berth 20 Victory or Liberty ships.

Before the government can embark upon a large-scale dredging program, new equipment must be secured. Further, loading and unloading equipment need replacement. There are 293 cranes (lifting from 1½ to 35 tons), but 45% are over 50 years old. Lighters to unload big ships unable to reach docks are also needed. Last year 85 such barges were ordered by the government.

• **Without Results**—Recognizing the seriousness of the situation belatedly, a harbor committee representing six ministries and seven trade groups was formed last year, but so far it has not even submitted recommendations.

Most seriously affected by harbor conditions will be U. S. ship firms now hastening plans to renew trade with Buenos Aires. Moore-McCormack, for instance, has announced the addition of 17 new transports within the next year, of which ten will be big ships of the Victory class. They are anything but pleased over the congestion they will encounter in Buenos Aires harbor once trade begins to flow in peacetime volume.

COFFEE UNDER SUBSIDY

Coffee rationing almost returned to the U. S. last week, but the Economic Stabilization Board backtracked to provide instead a 3¢-a-lb. subsidy to be paid to importers by the Reconstruction Finance Corp. This will permit retention of consumer ceilings, but will cost the government \$24 million. The subsidy applies to purchase of six million bags and is a "temporary expedient."

Importers are united in opposition to the move, asserting that the price increase ought to be about 5¢, predicting that the subsidy will not lure coffee into the market (it's being hoarded in Latin America in expectation of higher prices), and pointing out that it discriminates against Central American growers who will not enter the market with volume supplies until late next spring, and hence will not get their proportionate share of the bonus.

The Economic Stabilization Board, however, refused to consider a consumer price rise. Officials pointed out that coffee hoarding in Latin America probably could not continue after next year's bumper crop boosts world stocks to about 40 million bags.

ORIENT TRIPS FACE DELAY

American businessmen who have been wondering how soon they would be able to do business in the Orient

have just been told that they would probably have to wait some time for passports—except possibly in the case of China.

Mindful of the extreme shortages in food, housing, and transportation, Gen. Douglas MacArthur's Supreme Headquarters announced on Nov. 6 that requests from private business firm representatives to enter Japan and Korea would be approved only when their activities would directly assist the objectives of the occupation.

For similar reasons, and particularly in view of the difficulties experienced in western Europe in 1944, the State Dept. on Nov. 1 advised Americans to undertake only the most essential travel in Burma, Malaya, Siam, Sumatra, Java, Borneo, the Celebes, New Guinea, and the Solomon Islands.

While firms wanting to enter Japan will have to secure a military permit, by application to the War Dept. in Washington, such permits will not be necessary in the case of southern Asia. However, all passport applications for southeast Asia will be submitted by the State Dept. to the Supreme Commander in that area for his approval.

These restrictions are temporary, but no one knows yet for how long. Actually, consular and diplomatic officials are being rapidly dispatched to the Far East with the aim of assisting Americans to resume normal economic relationships as soon as possible.



MEXICO CITY DIGS FOR PAY DIRT

Mexican industrialists are financing, and Mexican contractors are building, \$10 million sports city in Mexico City. First unit of the project is the bull ring (above)—claimed to be the largest in the world—to seat 47,000 spectators. Other major features will be a 50,000-seat football stadium, a 20,000-seat boxing arena, a 5,000-seat theater, jai alai and handball courts, 40 bowling alleys, two mammoth swimming pools, a restaurant, a clubhouse, and a market. Both the bull ring and football stadium will be half above and half below street level, reducing concrete superstructure construction to a minimum.

CANADA

Rail Comeback

Canadian National shows gross revenue double that of 1939, uses surplus funds to reduce funded debt.

OTTAWA—Canadian National Railway, Canada's government-owned line, after a dismal record of deficits last year, is emerging from the war with current gross revenue more than double what it was in 1939. In 1938, C.N.R. had a \$54 million deficit.)

• **Improved Position**—The over-all picture since 1941 have been applied to reducing debt, and the line has moved into the postwar world in a slightly improved capital position. Because of vastly expanded operations, the ratio of fixed charges to operating revenue has been more than halved, but still stands in sharp contrast to that of the Canadian Pacific Ry. or of Class I U. S. lines:

	1939	1940
U. S. Class I railroads....	15.21	14.60
C.P.R.	16.12	16.12
C.N.R.	26.24	11.11

During the war, while revenue

SPEED...

Imagine a flying freighter...unloading its entire cargo in 7 seconds...WHILE TRAVELLING AT FULL SPEED!

That's not fancy...it's fact. During the war Army engineers equipped C-47's with U. S. Rubber conveyor belts which sent vital supplies parachuting to earth with pin-point accuracy.

Thus engineered rubber helps broaden the use of air express for future commercial purposes...permitting deliveries along nonstop flights...eliminating landings on time-consuming reruns over the receiving point.

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abrasive coal and ore, or foodstuffs and other materials—it operates below the earth, crosses valleys, descends mountains...and now, high in air, "kicks" cargo out into space.

Always, the most efficient conveyor belting is the result of close cooperation between the engineering groups involved...the user's engineering staff, the designers of mechanical conveying systems and U. S. Rubber technicians...each group dove-tailing its efforts with those of the others.

This cooperative effort was of immeasurable aid in speeding victory; it is no less essential for quick reconversion to a peacetime industrial order.

Engineered Rubber delivers coal to the surface.

Engineered Rubber delivers cargoes from the sky.



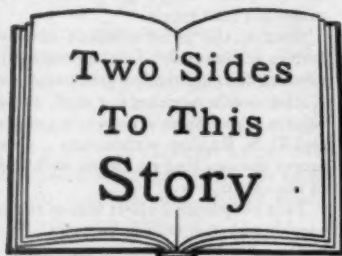
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The merits of plastics as they appear in products are well known today to manufacturers and public alike... their striking colors, lightweight, durability and versatility. But that's only half the story.

Not so well appreciated, but certainly equally important, are their advantages production-wise:

1. **Speed of production:** New high-speed, multiple production methods, with larger molding presses, preheating equipment, etc. give plastics significant new cost advantages.
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3. **Integrated color and finish:** Costly finishing or painting operations are skipped entirely or greatly minimized; color and finish are molded in plastics to stay.

Taking full advantage of those materials and production opportunities is often a highly technical problem. To solve it you can't do better than to contact a Monsanto plastics consultant. His long experience with one of the broadest and most versatile groups of plastics in the industry equips him to give you unbiased and expert advice on every phase of plastics applications. Simply address: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts.



climbed, expenses also rose because of higher wage rates and materials costs. These charges will stick after the war; so continued profits will depend on a very high level of business. In the past a gross revenue of \$300 million served to provide a profit, but postwar operations will have to be higher to make up for cost rises.

• **Revenues Climb**—The record of gross revenue in recent years has been as follows (in millions of dollars):

1936-40 (aver.)	\$203
1941	304
1942	375
1943	440
1944	441
1945 (est.)	433

Forecasts for the current year indicate total expenses of \$355 million and net revenue of \$78 million—leaving a surplus of \$25 million after providing for interest payments and other charges.

T. C. A. Expansion

Howe outlines the future of Dominion-owned airlines in two hemispheres. Railways must dispose of air interests.

OTTAWA—The pattern of expansion proposed for the Canadian government air services, Trans-Canada Air Lines (a subsidiary of Canadian National Railways), has been revealed.

• **Transoceanic Projects**—In seeking amendments to the Trans-Canada Air Lines Act, C. D. Howe, minister in charge of civil aviation, announced the following priority for the establishment of new international services, a monopoly of the government line:

- (1) Transatlantic, involving putting the present noncommercial services on a commercial basis within a few weeks;
- (2) West Indies and Latin America, in a year or more;
- (3) Transpacific, to Australia and New Zealand, also within a year or more.

• **Partnership in Pacific**—The arrangement for the Pacific service, long subject to negotiations between the Canadian and other British Commonwealth governments, has not been completed. However, Howe revealed for the first time that the government is prepared to operate in that area in partnership whereas it has refused to join in British Commonwealth pooling on other routes.

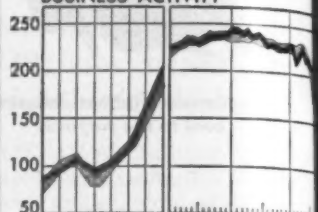
The governments of Australia and New Zealand with British Overseas Airways Corp. will form a joint company, and Trans-Canada Air Lines will deal with it in operating flight sched-

TREND OF BUSINESS CANADA AND U.S.

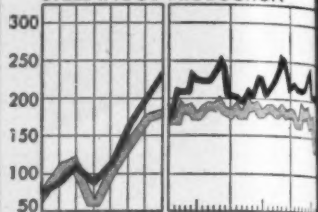
1935-39 = 100

CANADA

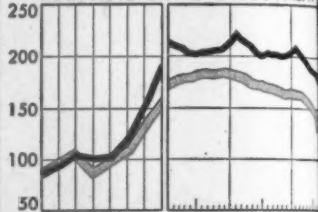
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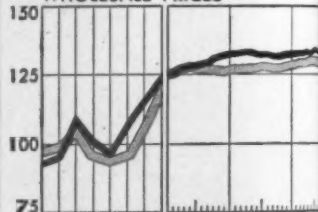
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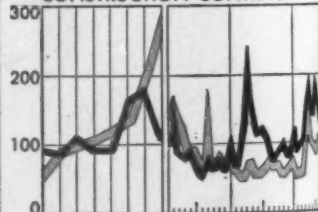
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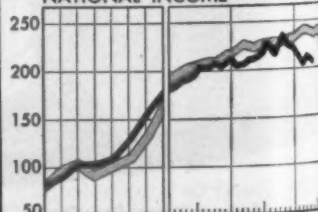
WHOLESALE PRICES



CONSTRUCTION CONTRACTS



NATIONAL INCOME



© BUSINESS

es. The intention is that the Australia-New Zealand-British setup will operate one flight and T.C.A. the other. T.C.A. will operate from Vancouver, but the combination flying the other direction may land at San Francisco and then go to Vancouver.

A Fivefold Expansion—These new routes, plus development of those connecting with the U.S., will effect at least a fivefold expansion of T.C.A. route mileage. To re-equip the firm, Howe has asked for an expansion of T.C.A.'s capital (BW—Oct. 27 '45, p. 121).

Under existing legislation, Howe stated, the government intends to issue a divesting order forcing railway companies to dispose of all interests in airlines. This means that T.C.A. will be forced from Canadian National Railways and become an individual government-owned firm. It also means that Canadian Pacific Railway must dispose of its bush and feeder lines, operating Canadian Pacific Air Lines.

Private Service Continues—Despite demands from Cooperative Commonwealth Federation members that the government extend public ownership to the C.P.R. lines, and from Progressive conservative members that policy of divorcing air and railway operations be reviewed, Howe gave assurance that privately run air services will continue. He declined to suggest where purchasers for C.P.A.'s short lines will be found, but expressed confidence there could be no interruption of services.

NOVA SCOTIA MINES SIGN

SYDNEY, N. S.—Nova Scotia coal mine operators have signed a new retroactive contract with miners for the two years ending Jan. 31, 1947, ending the threat of labor troubles that had been developing since last midwinter.

The contract is based on a decision of Canada's National War Labor Board passing on to mine workers, in wage increases, a boost of 33¢ a ton in the price of coal which Ottawa authorized two months ago. According to NWLB, the pay rise amounts to 17¢ extra per shift per man. The miners had asked for \$1-a-day increase but have accepted the board's decision, which also gives them two weeks' vacation with pay. Together with the pay boost, this nets miners an estimated \$77.54 in a working year.

At recent hearings before the Royal Commission on the Canadian coal situation it was stated that federal subsidies of \$8,400,597 were given the Nova Scotia industry in 1944. Without them, it was claimed, the mines would have shown a loss of \$7,554,688; with them there was a profit of \$845,909. Investment in the mines exceeds \$35,000,000.

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LANE - WELLS COMPANY

DIVIDEND NOTICE

The board of directors has declared a quarterly dividend of 25 cents per share on the common stock, payable December 15, 1945, to stockholders of record November 28, 1945.

B. G. PETERS, Secy.-Treas.

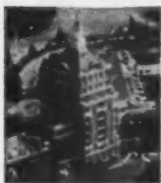
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THE MARKETS

(FINANCE SECTION—PAGE 62)

The sudden spell of profit-taking that started to chill stock market enthusiasm sharply early last week turned out to be short-lived, with little carry-through. Substantial price losses which were brought on by the selling didn't remain long in evidence.

• **Rails Rebound**—News that Southern Pacific directors thought the outlook promising enough to increase the road's quarterly dividend rate from 75¢ to \$1 soon began to generate considerable interest in the rail group, recently pretty much neglected. This quickly spread into other sections of the list, and by Saturday enough buying enthusiasm of the type seen earlier in November had been rekindled to send both the rail and industrial stock averages kiting up once more to new post-1937 price peaks.

The same brand of exuberance, however, was conspicuous by its absence when trading was resumed on Monday of this week on the New York Stock Exchange. Once again prices began to move towards lower levels, and it was noticeable that trading volume didn't contract as market values started to fade. Particularly weak on Monday were the steel and motor stocks and, because of the over-abundance of selling orders which accumulated over the week end, both General Motors and Chrysler were noticeably late on opening.

• **Disquieting Labor News**—Much of this heaviness was attributed by brokers to hesitancy engendered by the disquieting nature of the labor news from Detroit. There was also much disappointment in the air over the OPA announcement of ceilings for new cars. Although the losses General Motors and Chrysler shares evidenced when the market finally closed

were much less, at one time during Monday's trading session these two were off as much as \$2.25 and \$3.50, respectively.

Early trading on Tuesday disclosed a continuance of the drab Monday trend. Once again, however, the market showed its receptivity to good news. Before the day had ended there was a long string of favorable dividend announcements (including a disbursement by Eastman Kodak which brings its 1945 payments up to \$7 compared with \$5.75 in 1944) and stocks were moving up sharply and had retraced a good part of the previous day's losses.

• **Newcomers Attracted**—Trading in "cats and dogs," the Wall Street name for stocks selling below the \$10 level, continues heavy, and most brokers can cite many interesting examples to show how the uninitiated stock buyers are flocking to this group.

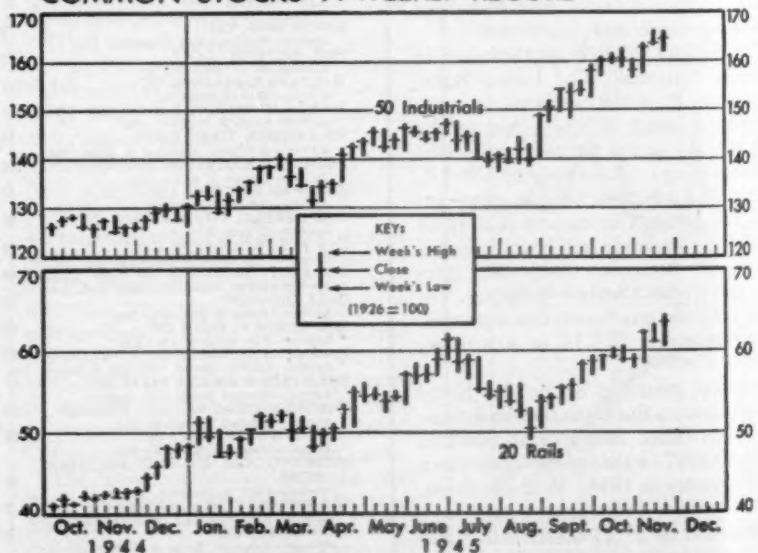
Many of such traders are reported to have amassed fantastic paper profits. Most appear determined to hold on to their holdings until the cow has been milked dry to the last 4th; suggestions or warnings from their brokers are falling flat.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	165.4	163.6	160.5	126.1
Railroad	65.0	61.1	58.9	42.9
Utility	84.6	85.0	77.8	54.4
Bonds				
Industrial ...	122.3	122.1	121.9	120.6
Railroad	117.1	116.3	115.4	111.1
Utility	115.9	115.9	115.7	116.6

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

ns and Mountains

continuing its practice of supplementing coverage of the national scene with occasional reports on purely regional interests, Business Week passes to its readers this appraisal, by a long-time resident of Montana, of the post-war outlook for the northern Rocky Mountain and Great Plains area.

* * *

Reconversion is a word we often read seldom hear.

Businessmen in this region include farmers and stockmen, as well as the big mining, power, and lumbering interests. Outside the service fields are primary producers. As such they have no particular reconversion problem. They continue to produce in peace the same things as in war.

They realize, however, that the degree of success in reconversion elsewhere will determine, to a considerable extent, the future demand for their products. They have a direct financial interest in legislation or conference that may create a demand for more goods.

* * *

Generally speaking, the immediate outlook for agriculture is good. Obviously, some adjustments will have to be made by the farmers. But they are assured continuance of the price-support program for two years after the end of war. If the danger signals now belabored are recognized, the change will be a gradual one.

Sugar beet growers, for instance, can depend upon a demand for their crops in the present world shortages disappearing. After that they must rest their hopes on tariffs and subsidies, or on increased mechanization to eliminate the need for hand labor in cultivation and harvesting.

Even those who would be content to let the industry wiped out, if domestic production were the only thing to take, hope that the race to make sugar beets economically sound will be won because (1) this cultivated row crop, one of the few grown in the area, will eliminate weeds, and (2) beets, grown in the irrigated valleys, complement the livestock industry since both beet tops and beet pulp may be used to feed calves and lambs for market.

* * *

Livestock men have been warned that they must reduce their herds on the basis that the number of cattle has

grown too great. They argue, however, that the whole story has not been told by the statisticians. It is true, they agree, that there are more cattle than before, but there also are more people than ever before. In the opinion of many who have given the subject long and serious study, the real measure of what the cattle census should be is the capacity of winter ranges. This varies from year to year and must be checked closely, for one season of over-grazing means several years of lowered productivity.

"The Plains area wheat farmer fears the return of a free market because experience has convinced him that, on such a market, it is the surplus, rather than the consumption demand, that sets the price. He is equally opposed to acreage control as a means of insuring adequate prices.

"There appears to be universal agreement that the best way to dispose of a surplus is to eat it, but there is, as yet, no unanimity of support for any one of the various plans that have been offered to control or dispose of the excess over normal demands.

"The average wheat producer hopes the economists are right when they say that a high level of business activity the world over will, of itself, virtually wipe out the surplus menace. But he wants assurances, as well as hopes, and so may be expected to continue to look to Washington for some magic formula that will bring him high prices regardless of how the rest of the economy fares.

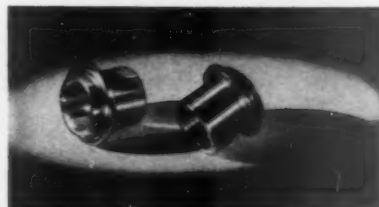
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"Industrially, gloomy predictions of what would happen when war demand ceased have failed to materialize. There have been some labor troubles, and more may develop, but no one seriously expects strife such as that which marked life in the copper and lumber camps during and after the last war.

"Demand for copper continues strong. It would require many months of full production for the Rocky Mountain sawmills to fill present orders. Meanwhile, progress is being made toward putting more of the tree crop to commercial use.

"A recent survey showed that slightly more than 50% of Montana's timber cut was for firewood. Now it appears the lodgepole pine, previously used principally for fuel, may be a life saver for power and communications companies seeking poles for replacement and line extensions."

"SEE" FOR SEA DOGS



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THE TREND

NOTES ON THE NATION'S WAGE PROBLEM: II

The economists working for the federal Office of War Mobilization & Reconversion have told the President, and—via one of those Niagara-like Washington news leaks of their supporting memorandum—the general public, that wage rates in manufacturing in the United States can be increased by 24% at this time without blowing the lid off present price ceilings. At the same time, the managers of the United States Steel Corp. have stated that price relief must be granted if any wage rate increases are to be made. While the managers of some other industries have granted modest wage increases or expressed willingness to do so, there is widespread and violent disagreement with the findings of the government economists.

• Granting good faith on both sides, as we do, what is the explanation? By way of unraveling that key part of it which is centered on the issue of profits and profit prospects we submit the following propositions:

(1) While the total volume of profits rose rapidly during the war because of a greatly increased volume of sales, and the volume remains large, the gross margin of profit did not follow the same course and is much smaller now than it was before the war. Thus a person concentrating on the total volume of profits before taxes will find it lush, while a person concentrating on the profit margin will find it thin.

(2) While a thin profit margin sufficed to get out production during the war, it does not follow that a thin profit margin will call out adequate production in the immediate postwar years. During the war, the impact of the profits "squeeze" on production was eased by patriotism, special prices to high-cost producers, government financing of new facilities, etc.

(3) A general average of profits, such as that used by the government economists, covers the whole anticipated volume of production and tells nothing about whether there will be profits (and so production) on the high-cost portion of the anticipated production. In particular, for companies whose profits fall below the average, even into net losses, there is no nourishment in the general average of profits or the outlook for it.

• These three propositions provide the broad framework of an explanation of the conflict between the government economists and the industrial managers on the wage-profits issue.

Between 1940 and 1944 profits of manufacturers before taxes rose from \$5 billion to \$15 billion, a threefold increase. Over the same period, however, the average margin of profit was squeezed more than 20% as a result of an average increase of more than 40% in wages which was only partly offset by a less than 20% increase in

prices. In the meantime there was no increase in the productivity of workers making civilian goods. If the prewar profit margin had not been squeezed, the 1944 total of profits before taxes would have been about \$20 billion instead of \$15 billion because of the enormous increase in sales.

In getting at what would be an adequate volume of profits in 1946, however, the government economists start with the reduced margin which resulted in a \$15 billion rather than a \$20-billion total in 1944, thus projecting the wartime profit "squeeze" into the period of peacetime production. Then they propose further wage increases which would cut this constricted wartime profit margin still further in 1946. Indeed, in the absence of a large rise in productivity, the profit margin for 1946 would be squeezed almost 40% below the level which consistently prevailed for 20 years before the war. The calculations supporting this conclusion are too extensive to be set down here, but we are sending them to the government economists for checking and would be glad to send them to anyone else.

• The general theory animating the government economists in putting and keeping the "squeeze" on profits is obviously (1) that a greatly increased volume of production in the postwar period as compared to prewar years will give industry an adequate volume of profits even if the margin is sharply cut, and (2) that the cut in profit volume is needed to provide consumers with enough money to keep production going full blast.

The industrial managers find this theory interesting but can find in it no convincingly affirmative answer to this crucial question: How is a doubly squeezed profit margin in 1946, a margin not much more than half as large as that which prevailed for years before the war, going to offer the inducements necessary to turn out the record-breaking peacetime volume of production which the government economists predict for that year? The question is particularly urgent, of course, for those companies which either have been making profits below the averages used by the government economists or have been losing money.

The profit margin will be big enough if we get the production, say the government economists. There is no reason to believe that it will bring forth as much production as you predict, say the industrial managers; it may simply be a shortcut to bankruptcy.

• In general, the industrial managers feel the necessity of having at least a glimpse of where we are going before acting as though we had arrived. The government economists say we must act as though we had arrived in order to get there. That is the essence of the conflict.

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